

Putting the Pieces Together

Proceedings of the PEPNet Biennial Conference



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Putting the Pieces Together **PEPNet 2008 Biennial Conference**

Providing access services, addressing academic issues, focusing on testing accommodations, utilizing technology for access and instruction, identifying non-college options, and coordinating transition services are just a few of the “pieces” that service providers must figure out when working with students and young adults who are deaf or hard of hearing. When planning the recent PEPNet conference, *Putting the Pieces Together*, we wanted to highlight the variety of experiences that our colleagues have in providing services to this population. We recognize their creativity in adapting existing practices and developing new strategies and resources to address the needs of an ever changing population.

Putting the Pieces Together provided a distinctive opportunity for professionals to interact with their colleagues to learn more about effective practices and strategies for meeting the needs of deaf or hard of hearing students at the secondary and postsecondary levels. Conference participants engaged in sessions that focused on identifying and implementing research-based practices as well as the “nuts and bolts” of managing and delivering effective access services. One of the goals of the conference was to more firmly establish collaborative efforts among professionals who share a common goal: ensuring provision of the most effective educational programs for students who are deaf or hard of hearing. Instead of operating in isolation, we can create additional opportunities to share knowledge and experiences that will have a positive impact on our students as they transition from secondary education to postsecondary education and training programs. It is our hope that this information will truly support each reader to put together the pieces in providing effective services to students.

We are grateful to the support and involvement of colleagues who helped make this conference so successful. We would like to thank the U.S. Department of Education, Office of Special Education and Rehabilitative Services for their support of the four regional centers and our related activities. We’d like to offer a special thanks to the session presiders, friends of PEPNet and other conference volunteers and planning committee members for their willingness to assist throughout the conference. Our deep gratitude goes to those who provided additional support for this conference, including:

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Of course, the interest and enthusiasm of all of the presenters and participants made this conference a very meaningful event. We appreciate the time and effort extended by many of the presenters to also submit an article for this volume of conference proceedings. To everyone involved, thank you very much.

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PLENARY SESSIONS

The Diversity Piece -- Where Does It Fit in the Puzzle?

Sam Atcherson, Tina Abdul, Martha Davies, Teraca Florence, & Parvin Karobi

Abstract

“Multiculturalism” and “diversity” are terms that are frequently used on campus and in the work environment, but what do these really mean? How do we as educators help to build a more inclusive environment? How do students from underrepresented ethnic or racial groups survive and thrive in postsecondary settings? A panel of students and young professionals shared their thoughts and experiences about deafness and diversity as it relates to their secondary and postsecondary educational programs.



Elise Knopf: Good afternoon, everyone! Welcome to the last session of the day. I hope you've enjoyed today's workshops, and the networking that has been available to you.

We're excited to introduce the final panel. It's a wonderful group of diverse people from around the country who have come to give you a special treat. They will be talking about their experiences, their frustrations, their struggles, and you will hear their stories of their successes and their struggles.

Leading this session, facilitating will be Dr. Samuel Atcherson. Sam is a professor at the University of Arkansas. He is deaf, himself. He also has a cochlear implant, and he is an audiologist. I am really impressed. It's really nice to see that. So he will be leading and facilitating the panel. We ask that you hold your questions until the end. And if you have questions, please come up to the front. We're setting a communication rule here, and it's important because we want everyone to have access. So without further ado?

Sam Atcherson: Thank you. Welcome all of you. It's really a pleasure to be here, but it's really an honor to be in the presence of these students here. I have had a brief opportunity to chat with all of them, and their stories really – well, 75 minutes is not enough.

At the end of this presentation, you can come up and talk with them some more about their lives and their stories. They're just so wonderful. At lunch, the hair on my neck was standing up after hearing some of the stories they were sharing with me. So really it's a wonderful treat to be here.

I want to introduce them, but I am only going to say their first name because already in your program there is a short bio about each one of them. I encourage you to read them for yourself.

The panel includes Parvin, Teraca, Martha, and Minoru.

How do I start? There are so many questions that I want to ask. Let's start with some general questions, and then ask some very specific questions for each one of them. So let me just start by having all of you share something about why you are here now. How did you arrive here? Maybe something about family or your educational background.

Parvin Karobi: Hi, everybody. My name is Parvin. I am from Iran. I moved here about eight years ago. My dad had some reasons about why we moved to America. We had to get away from there. We went to Pakistan, and then we had to get accepted, and it takes a really long time. It's a really long process because you go to this huge building. It's kind of like an immigration, and they tell you that you can go to America, or you have to go back to your country, or they send you to another country. It depends on them. They make the decision. Because of my dad's good reason, they told us that we can come here. So after six months we came to America.

I was brought up oral. I just two years ago learned sign language. So to this day I am still learning a lot, and I had a really tough time when I moved here because of the culture, and language.

Teraca Florence: Hello. I grew up in Atlanta, Georgia. I went to a mainstream school my entire life. What about my background and my family? Some of them had dropped out of high school. Some had gotten a high school degree, and that really encouraged me to get a better education. My goal was to get my high school degree and graduate with distinction. So basically, I'm the first in my family to do that.

All my life I've noticed that my parents have struggled. That's caused me to become a lot more independent, and for me to think about what I need to do to be successful.

Martha Davies: My name is Martha and I am from Africa. I am actually from Sierra Leone which is in West Africa near the ocean. I live in Minnesota now with my mom and with my grandmother.

First of all, when I was in Africa, we lived in a refugee camp. There was civil unrest. It was a horrible war, and we were able to escape to a refugee camp. There were no educational opportunities for me there, so we moved to another refugee camp that was called Gambia. We continued there for six years with no educational opportunities.

Fortunately we were able to move to America. We came with our family, and I'm living with my family now. I was able to go on to school and to college. I attended Hennepin Technical College. I was able to get my certificate of completion this past May. And that's me.
(Applause)

Minoru Yoshida: I was born in Japan. The town that I was born in was Kyoto, and this is the sign for that. (*demonstrates sign*)

I went to the deaf school there probably until I was four or five. Throughout Japan in deaf schools oral education is a very common philosophy. From there I was mainstreamed for elementary school through high school. My dream was to learn English, a foreign language. I pursued that dream when I became a senior.

My dream was to go to a university and study foreign language. Mostly that foreign language was English. The problem was that most universities looked at me and said, "Well, you're deaf and how can a deaf person study a foreign language? How do we support that endeavor?"

I had a chance to visit several universities. I could apply, I could go in, and I could take the test, but once I got in, their philosophy was, “This isn't our problem. This is your problem. You need to take care of yourself.” And that caused a problem for me.

One option was to go to America. So in my senior year I made the decision that I was going to America. I arrived about 10 years ago, in 1998. I first went to school, and it was a ESL program. There were no support services for the first six months. It was a very frustrating experience. Lipreading English was tough. Reading and writing was okay, but lipreading was most difficult.

So I transferred to Harper College in Illinois for one semester. It was a wonderful semester with an ASL/ESL program for the deaf. After that I transferred to the Rochester Institute of Technology (RIT) and NTID, and I have been there for nine years. I graduated with my BS degree in technology, BA in technology, and now I am working full-time at NTID while at the same time attending graduate school which brings me to where I am today.

(Applause)

Sam Atcherson: Now I am sure that many people here are curious about cultural barriers you might have experienced. One culture may be your country or your community, but another culture is the Deaf culture. I am sure that there were some shocks involved. So can you share some of that, not specifically educational experience, but your culture? How did that affect or impact your communication?

Parvin Karobi: Well, first of all, there is culture and also religion, too. I am Muslim, and I have had a hard time here because most of the people tend to be Christian. Sometimes people do not understand where you are coming from, or they could be a little bit racist. People misunderstood me sometimes because they think I talk really good and they assumed I was hearing. That happened, too.

Teraca Florence: As most of are you probably familiar with, the Black community, we tend to know everyone. People tend to be involved in gangs, and drugs, and violence and all of these different issues. And it's a lot of drama. But that's not always true. It's not true.

In the environment that I am actually from, it's much more the ‘hood. We use a lot of slang language quite frequently. It can be really hard for me because I have bad habits of swearing. I realize I have to change that. I know that I am in a different environment now from where I was. And English in a more formal environment is different.

So in my mind, I have to change what is normal to me or natural to me. I have to change myself and get out of that small box. I have to expand my mind and really envision learning from a different culture, a different community, a different language and everything that's involved in that. Everything was thrown at me all at once, and I've just had to adapt.

The high school dropout rates in the Deaf Black community are very high. But most of us have motivation, and that motivation is from our friends and from our parents. Because we feel like we have to hold those things, sometimes people say, “You trying to be white now?” We get that kind of attitude back from our community. “Oh, you want to be out there with white people. Oh, please, stay with us.” This mentality. And it's whatever they think. What's my response? No, I'm not white. I'm still black. Look at my skin. See? You see it's black. That hasn't changed.

Inside of me there is a change that's happening, but the outside is still the same as it was before. So that's something that I struggle with.

Martha Davies: Well for me in West Africa, wow, there were so many concerns that our family had in trying to go to the deaf school when I was a younger child. It was difficult. There was no education for deaf children there. There were no interpreters available. There were no teachers who knew sign language. It just wasn't even available.

There were a number of deaf children in my classroom, and we would wait for a teacher. The teacher would start speaking or writing on the board, and the deaf students in my classroom could not hear who did not understand. I would advocate for myself; I stood up and I said, "Excuse me, I can't hear you. What are you teaching us because I can't hear anything?"

The teacher looked at me and said, "You need to sit down and wait. I will talk with you after class. I will teach with you one on one. You wait."

I had to tolerate that treatment, and I felt so sad for all of the deaf children that were in this mainstream classroom. The teacher would speak and write on the board, and we were totally lost. When the teacher got finished, she immediately left the classroom. There was no one-on-one time, and how were we going to pass our course work? We couldn't. The education was so poor. So I had to tolerate that.

As time went on, I moved into high school. In high school I was the only deaf student in the entire class. The same education went on where the teacher would write on the board. I struggled and was frustrated; I got sad. I wanted to have education. I wanted to improve my experiences. I wanted to be on par with my hearing peers, but I felt so alone being deaf.

Then I felt that there needed to be more advocacy, and so I had to advocate for myself once again. I would raise my hand, and say, "Please, I am deaf and I can't hear what you are saying to me and I don't understand." There's no access. I got punished for that, for standing up for myself. The teacher did so with a rod and hit me on my head and I began to cry. Of course, all of my classmates laughed. And I had to endure that, sit in class, and cry. I realized that all of my grades were going down. My self-esteem was going down. We were very poor, and my family was very sad for me.

Once we moved to America, they saw a great improvement. I was able to work with Greta who is in the audience with me, and she was a great deal of help for me. She helped me understand what was going on. I didn't even know about currency. I was thinking that the dollar was equivalent to \$100. My mom, she used to give me \$2 and \$3, and I was able to say I am happy with that. Going to school with that I felt like I was rich, realizing now I was not.

(Laughter)

But to me, you have to understand, for me that was. Greta was able to educate me. She taught me about mathematics, how to budget my money, and about currency. Oh, okay, now I realize I am not so rich.

(Laughter)

When I went home, my mom would work with me and she would say to me, "Come with me. I will give you three or four or five dollars." I would say, "Fine, Mom." When she gave me money, I asked, "How much money are you giving me?" And my mom replied, "Well, you know this is the normal \$3. "Ah, Mom," I said, "That's not enough. I need to have \$20 or \$25."

(Laughter)

My mom would be somewhat shocked and wanted to know how I learned about these currencies. I told her that was why I was going to school. I am getting that experience. I didn't learn anything before, but Greta has taught me a lot, and so I appreciate that it's changed my life.

(Applause)

Minoru Yoshida: Well, I have been here for almost 10 years, and memory has faded over that period of time. But I'll be leaving the U.S. in three months in July.

In looking back, one of the similarities among Asian cultures is that the parents tend to not praise you. You don't tend to hear "Congratulations, good job." Parents will tell you to work and get good grades, and you do that. Well, of course, that's what I am going to school and studying for. When I came to the U.S., I started receiving many more positive comments. In the back of my mind, it made me wonder, "Did they mean it, or did they not mean it?"

I was never exposed to that at home. Once in awhile I would get a comment, but, you know, you are supposed to be humble in public. Then here I come back and I receive these accolades and congratulations and everything directed at me. I am not saying that my home culture was wrong, but it was just different coming to America. I had to learn how to accept these compliments. That was a bit of a shock.

Sam Atcherson: Now I want to change the topic to something more educational. All of are you going to college, or maybe you just graduated from college. Can you share your experience what was interesting to you? What was shocking to you? What was maybe some of your barriers educationally when you went into college or school? I'm talking about after high school. What was different for you?

Parvin Karobi: This is my second year at Georgia Perimeter College (GPC). In college you have more opportunities, like you have more access like note-taking, sign language interpreters, and C-Print. In high school you don't have that many options. Not all schools have all the interpreters. For me, so far, I have been doing really good. I have no problems with anything at all So it's been good, yeah.

Teraca Florence: I've always grown up with deaf and hearing and in the mainstream. Most of my interpreters are pretty good, but it was always limited for me. I just graduated from high school a few years ago, so I am still learning what to do in college and how things go.

My first exposure in college surprised me. I sort of thought, "What?" They said, "You have to take care of things." And I said, "Me? I have to take care of it? You are relying on me?" Back in high school I was so spoiled. They would take care of things for me. They would say, "You need to do this, and now this is your homework."

(Laughter)

And in college, uh-uh. It wasn't like that.

(Laughter)

It's like it's all you on your own, girl.

(Laughter)

I thought, "Okay." Well, the first time my dad and I went to the disability service office, I remember we sat down and talked about all of the different things that needed to be done. My dad said, "Thank you. We're done." And I kicked my dad out, and I said, "I am going to take care of it

now. I wanted to be more independent.” I didn't want to depend on as many people so much. So I got him out of that room, and I did not want to have to be dependent on anybody. I only wanted to depend on myself. I wanted to be my own self-advocate.

When it came to class work and everything in my schedule, everything seemed fine. I was able to pick the courses I wanted. I am not a morning person. I hate the morning. So I picked all afternoon classes, and I really had a lot more options than I have ever had in high school.

High school seems so limited now. If I wanted an interpreter for a class, I couldn't ask for it back in high school because there were no interpreters there. But someone was already there taking care of it. Now in college, I can ask for and request a specific interpreter by name. Maybe some aren't available, but some are. There's no guarantee.

I just started to learn that sometimes we really can't get exactly what we want because of limitations, but if we know we can always speak what's on our mind. So that was a huge shock and change for me. I'm still learning, though.

Martha Davies: Well, remember coming from West Africa there was no education. What I did get, my education was poor. So when I came to America, I went to a school and participated in the Vector program at school. It's a transitional program that was where I was able to take a number of different courses, such as English, mathematics, reading, banking courses, and things like that. I was able to take a number of different courses, and I was able to work with interpreters one-on-one in each of those courses.

Then I took a course in the printing program at Hennepin Technical College. I was able to complete a certificate in that printing program, and I learned so many different things. I gained experiences on the various machines. I was able to learn how to do graphics. I was able to work with the various inks and the various colors that we had. Sometimes the machines were quite complex and I didn't quite know what the name of that was, or what this part was, and I would ask the interpreter, “What's this?” or “What's that?” and the interpreter was able to provide that information for me. The interpreter for me was really a huge help.

In Africa we didn't have that service. How was I supposed to learn? How was I supposed to gain a skill? In America you are quite lucky to have that.

The interpreter worked with me on the various machines that I had in printing. I was able to concentrate on how the machines worked, and I was able to work in my first class. We had to learn how to do maintenance and various machines and learn how to fix things. That was the first class I took.

The teachers were smart, too. They would do something to the machine that would make it not work right. We would have to try to come in and figure out what they had done. I wasn't stupid. I had read the manual.

(Laughter)

So I was able to figure out that it's supposed to look like this, and it's supposed to run like this. I was able to fix things according to steps -- number one is supposed to do this and number two is supposed to do this. And the interpreter would work with me. She was very encouraging. So that increased my motivation to learn. I wanted to do that.

Coming from Africa, you know, I knew that I wasn't going to learn anything. Now I had the opportunity and the motivation to gain education, and I wanted to finish it while I was still young. You people here have already gone through school and have already finished college. I have the same motivation as you to learn. So I am working with the machinery.

The first course I took was one-color printing, and then I moved on to two-color printing. After that, I took three-color printing, and that's all on one sheet of paper where you have multiple colors. My teacher even complimented me that I learned quickly, and I said, "Yes, when you have a good teacher it's easy."

We learned so much. So I've just graduated with my certificate of completion and I am looking for a job. I am also taking care of my grandmother. She has been quite ill, and so that's what we're doing now. Thank you.

(Applause)

Minoru Yoshida: When I was in Japan we never had interpreters or any type of support services. I just relied on lipreading throughout that educational experience.

However, when I got to the U.S., I attended three different schools. Now, at the first school there were no support services. Harper College, the second school, had some wonderful support services there. The third school was RIT which has, as you know, over 130 full-time interpreters and provides thousands of hours of note-taking services. So I was able to compare these three experiences. I've had to adjust going from having nothing and not knowing how to advocate for what I needed.

Please understand that when I came to America, it was a new place. My ASL skills weren't all that great, even in the second situation where there were support services. I had to learn "A-B-C," and "My name is...." It's kind of hard to understand what's going on in the college classroom when you are learning language at that level. But they did provide CART services and captioning, and that was wonderful.

They tried providing an interpreter as an experiment, and that just worked well for me because I could go back and forth from there. With my strong English background through studying English in high school, I was able to pick up vocabulary. So my ASL skills improved as time went by. From there I was able to get into RIT.

RIT became more of a challenge because the academic level was higher and the information was much more complex. Sometimes the class moved at a pace that was much faster than I was used to with having other hearing classmates in there. But over time and by having accommodations and note-takers, I was able to get by. There was a challenge with resources there because there are so many deaf students. RIT provides excellent coverage, but there are last-minute exceptions where somebody is sick and can't show up. So, you have to deal with that.

I now am in my graduate program, and I am studying public policy. There's a lot of discussion that goes on in the classroom and the interpreter has to keep up with that. It's a little frustrating for me because the back-and-forth discussion is kind of hard to follow, and I am learning how to advocate for myself. That includes telling my classmates about using an interpreter and slowing the pace down. I say things like, "I am deaf, I have an interpreter. I need the opportunity to learn here. Can we create more pauses during the discussion?" and that works out well in that environment.

(Applause)

Sam Atcherson: Wow! I am already very, very impressed with this group. They seem like very, very goal-oriented people. But I am curious about something. What is your ultimate goal? What do you want to do? What do you see yourself doing in the future?

Parvin Karobi: My major is in social work. So that's like number one. I want to really get my bachelor's degree. Hopefully I will go to New York to RIT to get my master's. That's my number one goal.
(Applause)

Teraca Florence: My goal when I finish Georgia Perimeter College is -- well, let me back up before I really get started. I'd like to become a teacher.

I am from a small family. My friends and teachers also have motivated me because I tend to be more of a bossy personality type. That's just my habit. And I love to help kids. I want to show kids what you can do as a deaf person. I don't care whether you can hear or not. You can't stop us. So we need to put that aside, period.

I'm trying to get my bachelor's degree, a master's degree, and perhaps a Ph.D. We'll see how the money situation works out.
(Laughter)

I love to teach, and that's it. So we'll see how it goes.
(Applause)

Martha Davies: Well, my ultimate goal is that I need to get more education. The reason is I'm from a place that offered no education to me. I'm in a place now that I know that I need more education. I need to be focused and I need to continue in college educational experiences. I want to work toward a good job. I want to be like you people.
(Laughter)
(Applause)

Minoru Yoshida: For me, I've had enough of education.
(Laughter)

I've been in school for quite some time and I'm ready for the world.
(Laughter)

I used to be in information technology, the IT field, and right now I am working at NTID in a program called PEN-International. I've learned a lot through that work over the past three years. I guess my passion is to involve the community on that level. So I've changed my major to public policy.

After I leave RIT, I hope that some day, in my 30s or 40s, I might be involved in the WFD, the World Federation for the Deaf, or the U.N. I'd enjoy working with a variety of different disability organizations. I am improving my skills working toward that end. So, you know, the dream doesn't stop. You continue on towards the dream. But school is done.
(Laughter)
(Applause)

Sam Atcherson: The next question that I have may not apply to all of you, but some of you have had to learn different languages. When you came to America you really had to learn English as one language, but you really had to learn ASL, too. Can you share with us your experience on that? Did you have frustrations? Are you happy about it? How do you feel?

Parvin Karobi: At home I speak Farsi. It's really hard because when I go home I have to speak Farsi with my parents because they don't speak English at all, and they don't know sign language either. So I have to keep translating back and forth. It can be frustrating because sometimes I know the words for English, but I don't know the Farsi. Sometimes I know the Farsi, but I don't know the English word. So that's a huge problem I have right now, even though I am trying and working on it.

Martha Davies: Well, for myself, there was a different language. You have to understand that in Africa it's a much slower pace. It's more like your old sign language that we use in West Africa, but it's in a much slower pace. When I came to America and I saw deaf people signing, I thought they went so fast and I would miss so much. I felt like saying, "Excuse me, would you slow down? I don't understand what you are saying."

Sometimes I would embarrass myself. I was too shy to even ask. I took a ASL course at the Vector program, and so I would start kind of "stealing" signs from deaf students. I felt that I'd miss so much if my eyes ever closed. I was afraid to blink them, and I would work with my friends and say, "Practice with me, practice with me." Sometimes my friends would say, "Wait a minute," and they would work on their SideKicks. And I'd wait for them, and we would practice and work on that. I got to a point where I felt I was more natural in my signing, and so now I have a SideKick, and now I tell my friends, "Wait a minute."

(Laughter)

(Applause)

So I have learned some things. I am "stealing" ideas from the bright kids as far as what they've already learned. They already know many things. I didn't want to follow people who didn't know how to learn. I wanted to learn how to do things, too.

When my mother had me, she said that I was born hearing, and that I had gotten ill; I became deaf, profoundly deaf, and I didn't hear anything. And my voice went down, as she said. But my family didn't know any sign language. They only spoke. But I never forgot my home language. I never forgot how I spoke with my mother, and so we have home sign languages that we use, but other people wouldn't necessarily understand that.

Now I'm able to communicate with my friends, and I feel like I am on par with them where I didn't feel that way before. I did have wonderful teachers in my school, and I really appreciate that. They worked so hard with me to improve my experiences. They were so patient with me. Two of my teachers are here. One is Greta, and the other one, Kathy, is here as well. They've been such wonderful teachers. I am proud of myself as well. So thank you.

(Applause)

Minoru Yoshida: I knew Japanese Sign Language before I came here. It was a challenge for me to learn a new sign language. When I was at Harper College, that's when I was in for my first deaf culture shock. That was my introduction to American deaf culture. The friends that I met with were your tougher type of students. They would sign a particular way, and then they would say, "Well, you don't understand?" And they would just keep moving on. That's the environment that I learned in. I wouldn't ask them to repeat, but after a couple of months I learned how to behave with the

group. As time went by, say within three or four months, I started signing. I was able to express my opinion much better. But I had to do that by setting aside Japanese Sign Language. I don't have enough memory capacity for all of those languages.

(Laughter)

It was successful for me, but I had to put Japanese Sign Language on the side. I did learn ASL, and when I got to RIT it was a very diverse environment. It's a broad spectrum: you have oral students, you have some students that use Sim-Comm, you have some that sign PSE, and you have those who use ASL. You pick up the culture that you are in, and you learn how to traverse that continuum working with those who are oral deaf and those who use ASL. The deaf community is not a community of only ASL users. The deaf community itself is a diverse community.

(Applause)

Teraca Florence: I wanted to say before in my previous environment, we used to use Ebonics, which sort of means that we would -- I guess it means that we would not pronounce everything. Like "Wassup?" or "You is something, something, something," and we would talk like that.

It was so hard for me because I was signing, and there was English. When I was with my Black hearing friends, they're like, "Yo, wassup girl, and what's going down?" Et cetera, et cetera. I couldn't follow it. When I was signing with people, that kind of threw them off, too, because they couldn't understand me. I was trying to figure out who am I? Where do I fit in? Who am I talking to? It all depends.

With my mom at home, we have some home signs. I struggle a lot trying to teach my mother the right way to sign things because she wants to do it her way. When I'm talking with my friends, we sign and talk at the same time because we grew up with each other. I know hearing people. I know what they're like and I want people to understand me better. So I try to use my voice and switch a little bit.

With deaf people, I am different. I've been exposed to that since I was 14. It was a little late. I hadn't learned ASL until then. But I did sign with deaf people around the age of 14. Some deaf people say, "Oh, you sign too English, girl. We're not going to sign with you." I was surprised and said, "What? I sign too English? I am deaf like you. I don't have a problem with you. I don't get it." So I thought, "Okay, fine. I am going to figure out what's going on." And I would study the way that they would sign with each other and their communication styles. I would figure it out, and now I think that I have improved 1,000%. It's the same people who used to put me down, but now I can go back to them and use American Sign Language with them and say, "See, I got it now! Uh-huh."

(Laughter)

It didn't take me forever to learn it, but I did.

(Laughter)

(Applause)

Martha Davies: You go, girl!

Sam Atcherson: I thought this was a panel and not a comedy.

(Laughter)

This is really wonderful. About 15 minutes before we arrived for this panel, I was just noticing that we're altogether in a room, and we have some people from international countries, and still we are

communicating. Wow. And I think that's something impressive about ASL itself. So now we have this great networking opportunity.

Anyway, changing topics, hmmm, what do you do for fun?

(Laughter)

Parvin Karobi: I love hanging out with my friends, and, of course, going to the club. It's good to go out in the mall shopping and fashion. I like just getting together with my family every Sunday.

(Applause)

Teraca Florence: I'm a teacher at heart and I just finished my second year of studying at GPC. I love dance and go shopping and playing sports, like basketball. I was into sports before, and I'm a fan of the University of Georgia. I like watching ESPN, and I'm very into sports. One of my goals was to be a dancer. I wanted to do dancing with the Atlanta Hawks. That's my dream.

(Applause)

Martha Davies: What I do for fun? I love to make people happy, and I just hate to be bored with anything at all. So I thank God that we, all of us, are able to use our hands and work hard.

I have been able to get lots of experiences making clothes. I make beads and chains and necklaces. So I have skills that I use to make jewelry. I feel quite good at it. I've made things at home, and when I've gotten bored I get all of my bracelets out. I've got them in a box. I get out my beads, and I come up with creative ideas about what I am going to do. What colors match? What goes with a particular outfit that I've got? So I will come up with some beautiful designs.

I have been able to sell some of my jewelry and make money from that. All of the beads have come from West Africa. I bought them here, but they originated in West Africa. There's one deaf boy who swims in the waters and dives to find some of the things in the water. He shapes those into beads, paints them, and does some intricate designs on these beads. He sends them to me in America, and I make jewelry and earn money. Then I am able to send money back to him for the work that he has done. Remember that West Africans are generally poor, and I am able to earn money here and send it back to him for the effort and work he has done.

At home I have been able to work with my family and we have fun. My grandmother oftentimes is very bored. So I ask her, "Granny, can you tell me about your past? What was your experience like? What was school life for you like? When did you meet my grandfather? When did you get married? I like hearing those stories. It's my time to hear the stories that you have to share."

So my grandmother will share how she went to school and how things used to be. It's very fascinating to me.

I love shopping.

(Laughter)

When I go shopping, I have to be careful with my money. You know, with no job right now, I have to be careful. Sometimes I will go shopping, and I am addicted, and it's like, "Mama, can I have that one?" I am somewhat of a pest when it comes to that. Yeah, I like having money, but right now I have no job so I have to depend on my mom. I can't shoplift, and I can't take it without paying for it. So my mom has been very gracious.

What else do I do for fun? I spend time working with friends, text messaging, VP'ing with friends, making my jewelry, and having fun with family. Those are the things that I take care of, like the kids at home. I am a very happy person always. That's my nature.

(Applause)

Minoru Yoshida: Well, you may think that I am boring person because I work all day and I go to grad school all night. Then I work on my thesis, so it's 24/7. I have no life.

(Laughter)

But it will soon be over this May when, hopefully, I will graduate.

I do love to travel. I've been to more than 30 states here in the U.S., over on the West Coast, the East Coast, and the Midwest. I haven't hit the southern states yet, but some day.

I also love to go out with my friends to coffee houses. We have a wonderful coffee house that's open until 11:00 or 12:00 midnight. Friends get together and we chat. We have tea. I complain about my work... yeah, who doesn't? But we do have a good time. And that's it. I really don't have the money to go out and shop, but, yeah.

(Applause)

Sam Atcherson: I am already seeing the four of you as future leaders. Maybe you already are involved in leading your communities, or your friends, or your school. If you are doing something now, you can share that? If not, what do you plan to do to impact your community and your friends? How are you encouraging them?

Parvin Karobi: I am going to think.

Teraca Florence: I need to think, too.

Parvin Karobi: That's a hard question.

Teraca Florence: Martha?

Martha Davies: Well, please understand I am not quite sure about this particular question. During one summer a couple of years ago, I worked at a camp in northern Minnesota. I worked there with a bunch of deaf children. There were other campers there as well who had physical problems, but there was one particular day where they had a deaf teenage party. It was on their last day at the camp, and I was able to teach a small group of kids how to act and perform. I had learned this in Africa.

So I took those experiences, and I shared that with the four girls and the four boys, and it was so wonderful. We got together. I shared with them. I said, "If you don't mind, I am going to teach you an African dance." So we worked that out, and we were able to show the audience what we did on our last day. We were able to do that before they went home. The kids were motivated to do it, so we taught them the entire week this particular dance routine. The boys and girls wore the same clothes, matching outfits. I was quite proud of what they did and quite proud of what I did as far as teaching them.

I was thinking that maybe one day I could become a leader for deaf individuals and teaching them dance and performing arts, and maybe try to be equal with the hearing community. Oftentimes we feel like deaf people can't do that. We're not animals. We can do things. We can do everything that hearing people can do, and that's what I've realized.

(Applause)

Teraca Florence: Okay. I am ready. I just realize what I wanted to say.

This summer I am going to be working with deaf children from 6-12 years of age, all deaf. I won't work the entire summer, but I am willing to give up part of my summer to work with children because I think that they need us as deaf role models more than I need my time because I'm not selfish. I'm more than willing to give back to the deaf community. I appreciate everything that they've done to give to me to help teach me to change my characteristics and become the person that I can be.

Also with the Atlanta Hawks, I want to dance with them. So, yeah, that's all.

Minoru Yoshida: Hmmm, I'm feeling a little guilty because I wasn't really involved lately. I have been focusing on myself.

I am involved in NTID deaf international students group. These are students who have come, like us, and have made their way to the U.S. We've established a support group. I was one of the founders of this group back in 2003. It's moved along, and it's done quite well. I've worked on that. The group has grown. It showed marked improvement, and I am happy to see how it's evolved over the years.

For the future, you know, I'm just not sure yet. If I don't finish my master's degree, I don't know what I am going to do, but I want to go back to Japan. I do want to get more involved with the deaf community there. I left there when I was 18, but what my understanding of community at the age of 18 was compared to what it is now is entirely different, so I want to go back. I want to go back to my country of origin. I want to go back and meet with the deaf community there and work with the deaf community there and improve things for the deaf community there.

(Applause)

Parvin Karobi: I haven't involved with the community that much. It's really hard for me because of my parents' situation because I have a lot to take care of at home. So I taught as much as I can. In the future I hope to get involved more in deaf culture, and give more of my time. I just wanted to say that.

(Applause)

Sam Atcherson: When the four of you look out there in the audience, you see teachers. You see VR counselors. You see disability specialists. You see audiologists. You see administrators. What would you want to share with them? They are working with the future children, so can you give them some advice?

Parvin Karobi: I'm thinking.

(Laughter)

Teraca Florence: Well, she stole that. I am thinking, too.

(Laughter)

I know I could go on and on and on here. But for the people who are here, I want to say thank you. Thank you for bringing me here. I'm from Atlanta, and this is my first time heading up north.

I am really blessed that I have the opportunity to see some the world and to see it while I am young. You have influenced me to become what I want to become some day. And I'll pay you back one day. Guaranteed. You are the best.

(Laughter)

Love to all!

(Applause)

Martha Davies: Well, that is really a good question. For me, if it had not been for Greta and the other professors, I would not be here. I would not be successful. You know what I mean? If I didn't have the teachers out there, how was I going to be successful? The teachers are who made me successful, and I thank you so much for making my name out there, for sharing my experiences. I truly want to thank God for blessing me with you and those of how work with deaf children.

There are some teachers who are not really good at working with deaf people, who are somewhat clueless, and sometimes when they're trying to teach the deaf children need more. They need motivation. They need a way. I have concerns about that because they're not able to work with the children well.

But my teachers have been phenomenal. They have worked so hard with me. They've endured with me. They've had patience with me. I came from a place where there was no education. I came here to improve my experiences, and they have worked so terribly, terribly hard with me. They've sat with me one-on-one, teaching me the basics, teaching me currency, what one penny was, and what the "cheap" word was. The lessons went from what was simple to more complex concepts. It was hard work. I appreciate so much the work that you have done with me. I wouldn't be here today if it had not been for you. I appreciate your time.

You teachers in the audience, you audiologists, you administrators, be patient with your deaf students. Work with them. Help them improve their experiences. Help them become the person that they need to be. The students – we students -- truly, truly need your help. I thank you so much.

(Applause)

Minoru Yoshida: I could name all of the individuals, and then I would take all of the 10 or 15 minutes that we have left doing so. I just want to say that I do want to thank the people that have given of their time throughout this process of mine. Without their support I wouldn't be here.

But I guess one simple message that I want to say is that I've learned to be frustrated with people's attitude. It's an attitude of always thinking inside the box. Now, I've met people out there, and they say, "Well, you are different." What does that mean? Well, I understand their perspective. They see students all the time.

But I encourage people to think outside the box once in awhile. It's an important thing to do. For me, as an international student, my struggle is to let people know what I see and what I understand and what I've been through. As an individual without language skills in the past sometimes, you meet wonderful people out there. Sometimes you meet some frustrating people out there, and sometimes it's very hard to get people to understand what you are trying to convey. Yes, I've been here for many years, and I understand that it's difficult for humans to change, but understand that there are different perspectives out there. I encourage you to think outside of the box and discuss that amongst each other.

Parvin Karobi: I just want to say thanks. I am so blessed that I have VR, audiologists, I mean, everything. There is one specific person I really thank God that I met her, and that is Katherine Bruni. If I didn't meet her, I probably wouldn't be here. I probably would have given up college.
(*Applause*)

Teraca Florence: I wanted to add something. I was not motivated initially at college. I was willing to drop out, willing and ready. I wanted to sit at home and do nothing. But, no. Without the help, pouring out their hearts to me, I wouldn't be the person who I am today. Without the two of them I would not be here. I wouldn't be here. I wouldn't have been able to learn as many things as I have. I wouldn't be where I am right now.

I want to tell all of you people -- all of you -- that you need to pour out your hearts to help children. It doesn't matter what they have. Help them. Be honest with them. Be patient with them. It's tough, I know, and it can get on your nerves and be hard. But be patient with them because one day they will thank you, just like I am right now. I am giving my thanks out to Kathy and to Debra. They have called me on all of these different things, because I have a habit of procrastinating. Oh, my goodness, they were on my butt to get me to where I am now. And they still are.
(*Laughter*)

So thank you. Thank you for that. I love you, mom!
(*Applause*)

Martha Davies: And I think, too, that being a teacher is quite important.

Sam Atcherson: Wow, anybody need a tissue?
(*Laughter*)

I think that we have 10 minutes left and I'd really want to open this up to the audience. Do you have any questions for our four panelists?

Audience member: I had the wonderful pleasure recently to go to a presentation about black deaf community. This man who is a deaf person and also African-American talked about how he balanced the two cultures, and actually how he chose to identify himself. So I am curious for you. Do you identify yourself first as a deaf person with the community and culture, or do you identify yourself as your ethnic culture, or do you balance both as a dual identity?

Teraca Florence: That's a good question. I don't know. I don't identify as black. I am black. Look at my skin. I mean, that's not a big point for me. But the point for me is to not label myself black, but I am, but to label myself as deaf, period. That's it, because that's my identity. I'm not being discriminatory to other people who label themselves, but you see my point? It's just who we are. It's a color of skin. So what?
(*Laughter*)

Martha Davies: Now for me, that question is probably a good question. Coming from West Africa to Minnesota, I have had to mingle with a lot of black people. I also socialized with the black and white communities. I have lots of friends who understand. I've met two black boys at my school who don't socialize with other blacks. They don't have that experience. They only socialize with white people. Does that mean they feel like they're white? No. But I have both black and white friends, so I really don't know much about that.

Audience member: I mean culturally, I know that you are Iran, so how do you balance the Muslim culture with the deaf community, and for Japanese as well.

Parvin Karobi: Ask the question, please, again.

Audience Member: As a Muslim person, there are a lot of cultural aspects. How do you balance that with the hearing community and as a Deaf person as well?

Parvin Karobi: It's hard. That's all I am going to say. I am just living through it. I keep going on. So, yeah.

Sam Atcherson: I am going to add to that question specifically for you. Which of those cultures do you feel strongest with?

Parvin Karobi: I would say American, because one problem with my culture is that... well, I don't understand them all the time because they are always talk oral, so I think that's a huge problem. If they would have signed more, I would say that it would be balanced more. But in America I am more connected and feel more for them.

Minoru Yoshida: Oh, me? I get to answer. Okay. I have to come up with an answer. In Japan it's a more homogeneous culture with about 95% of the people being Japanese. So in Japan I always looked at myself as deaf first. That was the only way I was different from other people.

When I came to the U.S., all of the sudden I have these different identities: I am Asian; I am male; I am deaf; and I am white. Suddenly I started wondering, "Who am I amongst all of these different identities?" Through that and through my experiences at RIT, that's what really helped me grow emotionally and mentally, and I can honestly say that I am deaf first. That's where I identify with my other friends.

We have similar struggles, similar issues, and culture around the world. I believe deaf people around the world struggle with the same things on a daily basis. I'll have to say that's my first identity.

Yet, at the same time, there is a part of me that goes back to the Japanese culture; as you know, they're more quiet and humble. That's a direct difference from the American culture which tends to be more forthright and straightforward. After 10 years I know that it's going to be hard for me to go back there and play the nice guy.

(Laughter)

But, you know, I will do my best.

Martha Davies: Now, for me, I love the world. I love the various cultures. I learn from various cultures. How does your culture work? What does it look like? So I like the diversity. I love the world.

Sam Atcherson: Wonderful. Are there any more questions?

Audience member: If each of you could change one thing tomorrow, what would it be?

Parvin Karobi: In general?

Minoru Yoshida: What do you mean? Change it to what?

Audience member: Right now I am giving you a magic wand, and you each have one. What would you change tomorrow?

Martha Davies: What I would change tomorrow?

Teraca Florence: Man, you kill me with this question!
(*Laughter*)

Martha Davies: Well, for me, if I saw something new that I had never experienced before, how I would look and think of that from my past experiences would be that I would look at that and try to perceive it. But if I looked at something new I would try to integrate that into what I am doing if I was impressed by it. I am not quite sure if I am answering your question.

Teraca Florence: What would I change? I'd stop cussing. That's one thing that I would definitely change.
(*Laughter*)

Martha Davies: Maybe that was a good question then, huh?
(*Laughter*)

Parvin Karobi: I don't think I would change anything because everything happens for a reason. So everything has a purpose. I don't think that I would change anything at all. No.

Minoru Yoshida: Change? Change the system? Change anything? Is that what you mean?

Audience member: We have an opportunity to improve something. What? Our world? Our world is better how?

Minoru Yoshida: If I had to pick one, what comes to mind is research and studies tell us that deaf people have a third, fourth, fifth-grade reading level. That's something that we struggle with. I would make it ninth, tenth, eleventh. We see 70% of deaf people in poverty, no education, or lack of parental support. It's not just because they are deaf, but yet, it is. Their hearing peers have an opportunity to go to school and get an education. They don't have an opportunity to learn sign. That's what I would change.

I've many wonderful, wonderful educational role models that inspire me, and I think that they could become that. But deaf people around the world don't always have that opportunity. That's what I would change. That's the effect that I would change. Deaf people like us go out and advocate and change that internationally. But, see, we have what we have in America because somebody had a dream, and we moved forward with it. That would be my dream.

Sam Atcherson: Please join me in thanking the panelists. This has been a wonderful experience.
(*Cheers and applause*)

Elise Knopf: Thank you so much, Sam, for facilitating this wonderful discussion. It's really been great. And to all of you, good luck! We wish you all of the best, and I hope to see you again soon. Come back. You are always welcomed this is your family. We'll always be here to support you. So always remember that okay? Thank you so much, everybody.

Help! High School's Almost Over...What's Next?

Greta Palmberg, Elissa Becker, Melody Eubanks, Janis Friend, & Sally Prouty

Abstract

What do you want to be when you grow up? Will you go to college? What kind of a job would you like? These questions are typically asked of teenagers as they progress through high school and start planning for the future. And it's pretty common for parents to wonder, Will my daughter succeed in college? or Will my son be able to get a good job? Parents of a deaf or hard of hearing teenager may also have additional questions and concerns, and the professional community may not always be sure how to respond. This panel includes a group of parents who have been an integral part in helping their son or daughter consider the options and develop a plan for the future. Each of them has a set of unique experiences related to making decisions, learning about the array of adult services available, and re-tooling their plan, as needed. For professionals, these insights into the parents' experiences will give them a better understanding of how they can be supportive of parents during the transition process, especially during the gradual, but often difficult, process of letting go.



Dianne Brooks: I hope that you are as excited as I am to begin this panel discussion. Yesterday we heard from the wonderful students. It was very inspiring. Several of them came from other countries, and that was really amazing for me because I really had not been around this for a long time. Yet it was an eye-opening experience for me as an individual to sit and listen to those young people's experiences.

We don't want to forget that there are also parents involved in the transition process. They have issues, concerns, and experiences that may be parallel to what the students are going through in the transition process -- transitioning from school to work or to postsecondary education experiences. This morning we are fortunate to have a group of parents who have been through the transition process themselves. They are here to share their experiences with us. Greta Palmberg will facilitate this discussion.

Greta Palmberg: Good morning. We have a hard act to follow. I saw the student panel yesterday and I thought, "Oh, no, here we are." But even as they have their own experiences, we as parents have our own experiences. I think that we are all in a new club. It's called the PODA: Parents of Deaf Adults.

I would like to first introduce the panel and give a brief overview of our sons or daughters and the transition experience that we've had.

My name is Greta Palmberg, and I have a deaf son who is attending the University of Wisconsin in Milwaukee. He is hopefully soon finishing his second year, his sophomore year, and he is studying architecture.

Melody Eubanks: I have a 24-year-old deaf son who attended NTID for three years and has currently been accepted to the bachelor's degree program at RIT for industrial design.

Janis Friend: I am the mother of a 30-year-old deaf son who attended a variety of programs, and I might get into that a little later. He attended NTID, Jacksonville State University, Eastern Kentucky University, and Jefferson Technical College. He is now working for United Parcel Service (UPS) in Louisville, Kentucky.

Sally Prouty: I have a son, Andrew, who is 26 years old, and Andrew is deaf-blind. He will say, "Mom, I can't see very far." We use that term to get the appropriate services. Andrew recently transferred from a job working for the U.S. Army Corps of Engineers, and he now works for the U.S. Fish and Wildlife Service. Just recently in January, he received an award for getting off all government assistance. So Andy is living in his own apartment, commuting back and forth to work, living independently, and is very happy.

Elissa Becker: My daughter is Rose, and she is 29 years old. She graduated from the Lexington School for the Deaf in New York, and from a vocational center for the deaf. She is presently living at home, and she is working.

Greta Palmberg: Well, you now have a brief introduction of our sons and daughters. The proud moms sitting here on the panel didn't get where they were without a lot of effort and without a lot of help. We would like to fill in the story a little bit. I would like each of the panel members to share a little bit about the K-12 years, especially the secondary years. What was your role as a parent on the IEP team, and how did you help the team come through the transition process on planning for your child?

Melody Eubanks: I became involved with the IEP process--actually the first one that my son had--when he was five years old at the pre-school hearing impaired program. I became involved with the deaf educator, the sign language interpreter, the speech therapist, and at some point, some other mainstream teachers. I worked closely with the goals of the current year and on projections for the following year.

Greta Palmberg: As you went through that process, Melody, were there times that were frustrating? Or in that process, did your role as a parent change?

Melody Eubanks: It did. I realized at a very early age at the very first IEP meeting that there were standards that my son was constantly compared to. The teachers would also say that as a deaf person, he probably wouldn't learn to speak higher than a fourth-grade level. There was a constant comparison and then ongoing testing. But I always felt like I was the only one in the room that had high standards for my son. From that day on, I knew that every IEP meeting that I would attend I would have to advocate for my son. I would have to be the one out there gaining the knowledge to see what options could be available for him.

Greta Palmberg: Thank you. Janis?

Janis Friend: Actually, until my son was in high school, the experience with the IEP process was a pleasurable one in that he was in good programs; he was at schools for the deaf. I didn't feel that he

was being compared negatively with the standards. But when we got to high school and he opted to be mainstreamed, this is when some of the struggles began in obtaining appropriate services and working through that transition process. So it wasn't as easy then, but we came through it.

Greta Palmberg: Sally?

Sally Prouty: We were, I guess, fortunate that my husband had a job that enabled to us transfer. So in Andy's first seven years of life, we lived in five states. We were always looking for the optimal education and services and medical services that he needed. We didn't have to battle too much because we felt as though we found excellent services where we ended up in Minnesota.

We did realize, like you have said, that we had very high expectations for Andy. I know that my husband and I would go home and he would say, "Do you really think that can he do that?" And I would say, "You know, I don't care because if I have high expectations, then the people that are working with him will have high expectations, too." I remember times in high school where we were told that the same thing about the expectations, "But your son Andrew already has the highest reading level in this deaf education program." And it was a very well thought out educational program. And we responded, "You know what? We don't care because he still has a long way to go." So it was constant advocacy.

Elissa Becker: I think that the term "constant advocacy" is absolutely correct; it begins from the minute that they are born. As soon as you know what you are facing and what you are dealing with, you need to teach the teachers what they need to be aware of. That's all part of constant advocacy.

The moment when I realized that I had a huge battle to fight was when I realized that the IEP team in my town knew nothing about the deaf and nothing about low-functioning deaf at all. And yet they were the ones who were going to make up her list of what needed to be done in her IEP outline.

Once I really could see clearly that their concerns were not about Ruth, but more about keeping the money in the township and having to use that as the basis for what her needs were, I realized that I had to go out and find all of the programs that she needed to continue to learn as much as she possibly could and not be isolated into a situation where learning was impossible for her.

Greta Palmberg: I think that for myself I had a difficult spot. I have been a deaf/hard-of-hearing teacher on the other side of that table for 20 years. Then I walk into the office as the "mom." I am sure that I may have intimidated some special education teachers when I walked in there. That was not my intent.

But I was a little bit disheartened every time in an IEP meeting to hear what my son couldn't do and also hear what we needed to work on without any acknowledgments about accomplishments he had made and where he was at. I can remember in second grade he was reading at a second-grade level. Why weren't we celebrating that? Because I was quickly told that I can expect him to read at a fourth-grade level. I said, "You have the next, what, 10 years to make him go up two more levels? That's an easy job for you." I wish that statistic could get thrown into the garbage because it just has done more harm than good.

I have battled the expectation at every single IEP meeting. I've been trying to say that until he shows you that he can't keep up with his hearing peers, then that is your expectation for him. And that's where it needs to be. So I was the mom and the coach. Sometimes I was the same as you where I felt like my husband and I left the IEP meeting and we wondered, "Are we the only ones here that have those high expectations?" That was a struggle.

The other thing was listening to our child. At the end of second grade when he was about seven or eight years old, he said to me, "I want to go to the hearing school." And I responded, "Well, you're kind of there."

(Laughter)

"Nope, nope," he said, "I want to ride the bus with everyone in the neighborhood. I want to go to the hearing school."

As a mom I think we always have that second level of fear... that second level of it sounds easy to everybody else.

Just put him in swim class.

Just put him in karate.

Just sign him up for the YMCA class.

What we're thinking in the back of our heads is, "How are we going to get the accommodation? Who is going to say no to us? What if they say they can't afford to pay for those services?" We always have that second level and that's not something that we can separate because we've had that level to deal with for 18 years.

So when they come to a postsecondary place, that's ingrained in us. We're always thinking ahead. What if those services don't work out the way that you promised because, from our history, that has happened before? So let me go to that question.

Can you tell me of a time where there was a frustration in services or an obstacle that your son and daughter or your family had to overcome or had to overcome, and how you did that?

Melody Eubanks: Steven started out in the oral program, and he was there for two years. This was before he was five years old. During the first year he did well, but during the second year he lost more of his hearing and became more profoundly deaf. He was actually severe when he was diagnosed, so the second year didn't do quite as well because his hearing decreased.

At 5 years old he was put into the Clayton County Schools and was introduced to sign language at that point. I think that my defining moment as a mother is he had been developing language from different language activities that we would do with speech. But at five when he learned sign language he was able to come to me and tell me, "Mom, I'm sick and I don't feel good." And for the first time in our lives he was able to communicate that. I was delighted.

He could communicate that through his language, and at that point is when I knew I would have to embrace to learn as much as I could to communicate with him. I taught him to never give up. Never accept no for an answer. And my goals were to persevere through kindness, to work with the teachers, to work with the speech therapist, to merge the two worlds because he was a deaf person who would have to function in the hearing world for his whole life.

I wanted him to grow up and learn this is one world, and we all have to learn to get along together. So through the IEP at an early age I worked with all of the teachers, sign language interpreters. They would poke me in the side and tell me, "Come here. This is what you need to advocate for."

And they had my direct line. You know, we didn't have cell phones back then, but as soon as I got home the teachers would call me, or the bus drivers would call me, or the sign language interpreters

would call me, and they would say, "This is what we need, Melody," because they knew I was part of their team. Our goal was to achieve that goal for our son.

Janis Friend: Wow. I am going to try to not get on my soap box here. This is going way back. When my son was first diagnosed as being profoundly deaf, he was about a year old. I had never met a deaf person.

When someone came to me and said, "We have just the program for your child and we can make him just like a hearing person." I said, "Oh this is great!" so we put him in the program. He was there for 3½ years, and it was called Verbal-Tonal. Remember, this is a profoundly deaf child who struggled for 3½ years and was saying, "Ba, ba, ba, ma, ma, ma," and that was about it. He was becoming increasingly frustrated.

We had no communication. Our communication when he wanted something was to go in the kitchen and stand and scream while I emptied the cabinets or the refrigerator or whatever he was screaming in front of until we found what he wanted. And then he stopped screaming.

So at five years of age he was kicked out of the verbal tonal program because his behavior was so bad.

(Laughter)

Imagine that. No communication, five years old. I can get really, really bitter about wasting all of those language development years. I try not to do that. But as hearing parents we're at the mercy of the philosophy of the program that diagnoses our child as deaf. I hope that's changed. But regardless, he was kicked out of that program.

We were living in Knoxville, Tennessee, and he was referred to the Tennessee School for the Deaf. He started learning sign language, and it was like 360 degrees. This kid took off. I started learning sign language at the time he learned sign language. But could I keep up with him? Never in 1,000 years because it was just a whole different world. And became, I think, a model child.

(Laughter)

Greta Palmberg: They all are.

(Laughter)

Janis Friend: My husband was in management for Nationwide--that big tower across the street--and we were transfer several times. We moved to Kentucky to live close to a school for the deaf. When we lived in Memphis, they had an incredibly great day program with over 300 deaf students in it.

So we were very fortunate that we moved back to Louisville which was too far for him to be a day student at the School for the Deaf. He had always been a day student. This was an assumption that I made that he would go back to the school for the deaf and live in the dorm or whatever.

And he said, "No. I want to be mainstreamed." So that was when our battles began, and it was a struggle then for the next four years. But it was his decision. I received a lot of flak from the Deaf community because I was also a professional in deafness, but it's his decision and we'll deal with it.

Greta Palmberg: Sally, what about you? Was there a defining moment that you can think of for your family in Andrew's adventure and transition?

Sally Prouty: I think many parents feel as though, “Okay, we’ve got this IEP. We’re going to be on this IEP until hopefully 21. We’ll take advantage of all of the services, and then we’re done. And then our job is over.”

Well, I think that the defining moment for our family was realizing that we are lifelong advocates for our son, Andrew, and I think most of us will agree with that. I have two other children who are now young adults, and, yes, I am an advocate for them. But it’s a lot different having a child who is deaf-blind.

Elissa Becker: I think my defining moment for Ruth was when she was out of the Lexington School, and nobody told me what to do. And it was the first time that I was not prepared to tell somebody else what to do. So it took a very long time for me to research and find help through the adult services.

What I found was, because she was not only deaf but also severely learning disabled, that was going to be something that people just didn’t know how to deal with at that particular time. So I had to go to the mental health offices and try to get help from them, along with vocational rehabilitation in the State of New Jersey. However, they didn’t talk to each other, and so it became my job to be messenger between the two and get services done between the two different organizations.

It took over a year, at which time Ruth was just sort of sitting there until I met a lovely man who is part of the Lexington Center in New Jersey who said, “Wait a minute, we can help you because we will go out of our way to find Ruth employment and we will support her needs with a job coach interpreter.”

It was at that moment that I realized that there were people out there who really cared, and there were services except that nobody told you about them. So it became my job to make sure that everything that happened with Ruth was marked down so that I could model it no matter where we were. That was probably the turning point in her life as well as mine.

Greta Palmberg: We all have different defining moments. I think that for my family, it came very early. I was a special education teacher before I had my first child. So I was in the world of learning disabilities, and emotional behavioral disorders. In the learning disability world, our philosophy was “whatever works.” We tried this, we tried that, we tried this, we tried that. Some of it worked for one child. Some of it worked for another. And the goal was to make progress. Whatever you could find that would make progress is what you used.

And then I had my son. At seven months old I found out he was deaf. As an educator I was shocked that nobody agreed on the communication system I should use as a parent, on the education system I should use as a parent, or on the medical treatments, if there was one to use. As a parent, I was placed and thrown in a battle. But my heart was about this little baby, the seven-month-old baby that I felt I was not connected with. And I had to find a way to connect with my baby.

We finally decided that I was going to do signing. I won’t say ASL because that didn’t happen until many, many years later, and I am still learning. But we were going to sign. I remember carrying this baby around the house pointing out things in the kitchen and the living room and signing. I had this little parrot with these little hands that would sign back to me.

The first sign was cookie, and I am looking in my dictionary, “What was that, what was that?” And it was cookie. And we were so happy. And then it was “mom.” Notice, before “dad,” it was “mom.”

(Laughter)

So and then of course it was “mom” and then “dad.”

(Laughter)

And so we went around to the parent class and saying, “Oh, he is speaking ‘mom’ and ‘dad’.” We’re so excited.

(Laughter)

Until the sign language interpreter told us what that was.

(Laughter)

And then my husband wasn’t too happy.

(Laughter)

But I still felt a disconnect from this little baby. I felt like who is this person in here? How can I connect? And I was just getting back everything. And my hands, I’m like, am I communicating? It was just so foreign to me.

When he was about 12 months old, I was driving in the car. At that time you could have the car seat in the front seat, so he was in the front. We were at a stoplight, and like all young little boys he was just enamored with trucks and cars and all of those kinds of things. While we’re at the stoplight, he turns, looks at the gas station, and sees a car coming out of the car wash. He turns to me and he signs, “Mom, car cry.” And that was my defining moment. I thought, “Okay, I know who you are. We can have a relationship we can communicate. This thing is working.”

(Laughter)

Keep doing it.

We all have those defining moments. I think what I didn’t realize was the battles. I hate to call it a battle, but we go to battle for our sons and our daughters. We see them invited to birthday parties where we know they can’t communicate with anybody at the birthday party. Do you send them there and let them be frustrated? Do you keep them home? Do you ask the neighbor if you can send an interpreter with them? You know, everything, everything that they do in their life is not easy. And that’s part of our life. It becomes our life.

As we leave the secondary system and we go to the adult world, sometimes people don’t tell us that the game just changed and the rules are different. And we have been there. We’ve been the advocates. We’ve been helping. And now the rules are different. We don’t need you anymore. They’re 18.

(Laughter)

Do you know my 18-year-old?

(Laughter)

I want to talk with the panel because here we have a lot of postsecondary, vocational rehabilitation and community rehabilitation people. What was that shift like from the school system to the adult world? How did your role change and how did you figure that out?

Melody Eubanks: Through trial and error and a lot of bumps and bruises along the way. The State of Georgia initiated a high school graduation test. When my son was in his junior year, I was told that he would have to pass all of the portions of it in order to get a regular high school diploma. He started taking the tests in his junior year, and he passed the math, science, and history. By the time he got to his last portion of the senior year, he did not pass the writing portion of the high school graduation test. I was told although he had a 3.8 GPA and had gone through the four years on honor roll, he could only get a certificate of completion. That was when my gears kicked in again, I guess my motherly instincts.

I was like, "My son fought four years to maintain a high GPA. He was a pretty good student, never had any problems with educational system, and you are telling me that he can only have a certificate of completion? Fine!"

So I told Steven. I said, "This is the bureaucratic stuff that we have to go through. We're going to get you through high school, and we're going to get out, and we're going to do what has to be done for you to excel."

At that point that's when we found out about a reading and writing course that was offered at Georgia Perimeter College in Atlanta taught by Katherine Bruni. We decided to send Steven there because we told him, "You didn't pass the writing portion of the Georgia high school graduation test, but you will." He knew in our home it wasn't an option. If he failed he picked himself back up and he carried on. And that's the attitude he's always given.

Part of the learning process is learning how to teach him to be an advocate for himself. So he got a tutor. He had a private tutor and he attended that class. He also went to the Georgia Council for the Hearing Impaired and got tutored there through a GED program. So he had like three different things he was trying.

It took him two years. During this time that he was attempting to pass the writing portion, he was there every time trying to pass it. And we had applied for a waiver request through the Georgia State Board of Education. We waited approximately one year. I kept calling, "Can you tell me the status?" The response: "Well, it will be presented at the next board meeting. It's a long process, and you will have to wait. And do you realize that there never has been a waiver granted?" And I was like, "I understand." Like I said, my motto was always perseverance through kindness.

So we waited, and approximately one year to the day I called that office, and the lady was puzzled that I had called. She said, "You didn't hear?" And I said, "Hear what?" She said, "Your son passed."

It was his 13th try. It saddens me to sit here today to say that my son was drug through, and his self-esteem was diminished. But we gave him no option.

I failed to mention that he had visited NTID. They said, "We'll look at the whole picture and consider what kind of diploma you will get from high school, and you may be able to get accepted." Well, lo and behold during this process we found out, that you need a regular high school diploma. So I told him at that point, "Steven, you're going to pass this writing test." I told Katherine about our struggles. Katherine said "We're going to get him through it and he is going to pass it." So on the 13th try, after two years of trying, my son never gave up.

Sometimes he would get the results two months after he took it, and he would come home and he wouldn't even tell me. I anguished and I hurt for him that he had to be drug through what I call

bureaucratic guidelines that were set up for this testing system; he was somebody being tested in English as his second language. But he did not give up, and he is at NTID. I have sent letters to the State Board of Education, and informed everybody about his continued success.

(Laughter)

He is at RIT. He is very independent. In fact, when he was at NTID for three years, he told me, "Mom, I'm going to RIT." And I was like, "Sure, son, okay."

(Laughter)

Sure enough, they wrote us and they told us that he was accepted in the bachelor degree program for industrial design. He never once came to me and said, "Mom, help me with my portfolio, and what am I going to do?" He did this all himself. And he is at RIT now.

(Applause)

Janis Friend: I am sitting here listening and I am amazed how similar this is to an experience that we had in Jefferson County Schools in Louisville, Kentucky. There were a couple of really, really tough moments.

First of all, when we moved to Louisville and we asked for him to be mainstreamed, they had never had a deaf student mainstreamed with a full-time sign language interpreter. He was the first, but they agreed and we moved on from there. But they did ask that he be mainstreamed in the same school where they had the program for deaf students. They didn't feel secure with him there without that backup.

For the first year he was in that school which was downtown, it took him an hour to an hour and a half from our home on the bus to get downtown and back. So his next year he asked to be mainstreamed in his neighborhood high school. I can tell you that I was a wreck before we went to that IEP meeting to make that request. I didn't sleep all weekend. I called a lawyer. I mean, we were prepared. My husband and I went out to lunch and discussed it and discussed it and just agonized. And when I say agony, yes, it was agony.

My husband got the idea of taking a tape recorder to the IEP meeting because he wanted to make sure that everything was documented in case we had to file a lawsuit or something. So we walked in and he said, "I hope you don't mind if I tape this meeting." He set the tape recorder down in the middle of the table, and everybody is like (indicating). Now, I know that IEP meetings can be intimidating. And, even as a parent, an educated parent, I was intimidated at IEP meetings, even though I attended them on the other side. It's very different.

I can just imagine how parents who don't have a lot of educational background feel when they walk in that room with table full of professionals, and we know it all. We know what's best for your child, even though as parents, we know our child better than anyone does. But we got through that. They agreed, and then he had the interpreter.

He was making "As" "Bs," and he may have had a "C" thrown in there once or twice. He got through his junior year and the school said, "By the way, we've implemented a mastery test he has to pass to get his diploma." And I'm like, "No, no, no. You are not telling me that he has worked this hard and made his grades for all of this time, and whether he gets a diploma or not will depend on passing an English as a second language test."

They were only allowed to take it three times. He took it once in his junior year and passed math the first time. He could not pass the reading comprehension test. They offered free summer school

if you didn't pass it as a junior. He went to summer school, took it again, and didn't pass the reading comprehension. And so I started writing letters and calling people and telling them how discriminatory this test was, and nobody would talk to me. Finally I got a letter from the man who was the head of testing for Jefferson County Schools, and he said, "Well, we will allow accommodations for the test. He still has to pass it but we'll allow the test to be interpreted."

I called the lady who was head of deaf education at that time, and I said, "I want an interpreter for my son to take the test. I want the test interpreted." And she is like, "No, you can't do that. Only the instructions can be interpreted." And I said, "I have a letter here from Dr. Romney, and it says..." She responded, "Let me go get my copy." When she came back, she said, "You are right. It does say that," and I said, "Yes." She said, "Well, we'll let his classroom interpreter interpret it for him." I said, "Uh-uh, because his classroom interpreter was not a certified interpreter." It's the law now, but it wasn't then. Some of you may know Norma Lewis who is one of the world's greatest interpreters, so I said, "I want Norma Lewis to interpret the test."

(Laughter)

And they said, "Oh. Well, if we have it interpreted for Rob, we have to do it for all of the deaf students." And I said, "Yes."

(Laughter)

The school representative said, "Well, how will we do that because they're all down at this high school and he is out there?" I said, "He'll drive downtown."

Norma told me that the first day he came in, he was white as a sheet. She said that she feared he was going to have a stroke or a heart attack or something. It's terrible to do that to a child --put that kind of pressure on them that they've worked and worked and worked, and then you are saying you've got to pass this little test before you can get your diploma.

So I related to everything that you said. But I guess those are two of the toughest things. He did pass it with Norma's interpreting the test, and she said that at one point the special education or deaf education coordinator came in, and she said, "I don't even want to know what's going on in here. And she left.

(Laughter)

But we got through it.

Greta Palmberg: Thank you, Janis. Sally, could you talk about the adult services and how that change came along?

Sally Prouty: You know when you have a child in special education, it's like -- well, I felt in Minnesota that we got the Cadillac. The kids get everything. They have a bus that comes to the front door and it waits. It doesn't just stop there while the kid waits. The bus waits. So we get kind of spoiled because so many things are provided.

In Andy's IEP meetings we sometimes would have 12 people around the table, and they all had Andy's best interest in mind...and then comes graduation. He did go through a wonderful transition program with Greta as his IEP manager. But when that ended, suddenly I was no longer an integral part of the team anymore. I mean, starting at age 14, Andy started coming to his IEP meetings. By the time he was a senior in high school he started running; and by the time Greta got a hold of him, he was running the meeting with a lot of assistance from her. So he was on his path to becoming more independent.

But then get out into the real world and people don't talk to the parents anymore. They talk to the kids. It's a helpless feeling. I can give you one example. Andy finished the program. He was bound and determined to be a designer. He was going to make the games that Nintendo uses. He wrote a letter to Nintendo of America in Washington, and this lovely woman wrote him a private two-page letter, a personal two-page letter back to him describing how rigorous the program was. Lots of math...lots of high-level math. She suggested that maybe he start taking a class in computer design and see if he liked that, and then he could consider going on.

So he takes the class, he signs up, he goes to the disability office. And remember I said he's deaf and he just can't see very far? Okay. So he neglects to tell the disability office that he has very low vision.

So here is Andy in this class. He has an interpreter, which is, you know, to be expected. But he didn't not provide information that he couldn't see very well. This is a computer class, so the instructor is demonstrating on a computer monitor. Well, guess where Andy is sitting? Right in front of that computer monitor, and none of the kids around him could see. And he is oblivious. And nobody says anything to him.

I don't know if it's this poor deaf-blind kid that nobody wanted to bother, but nobody said anything to him. So he gets a message from the disability coordinator and someone further up; he forwarded it on to me and he said there is a meeting. I said, "Andy, what do you think the meeting is about?" He said, "Oh, I think it's about I asked them to get a note-taker." I knew that wasn't going to be the case. I didn't know what was going on because to no one talked to me. I am just the mom.

So we get to the meeting and they just dumped on Andy about how inappropriate it was. I mean, this was not the time and the place. The time and the place was taking him out after the class and discussing with him that maybe he should have told them about his vision loss. But no, it came to this very end where he is humiliated. And that point was my defining moment that I will always be involved somehow. So, yes, it was a learning experience for him, but at a very high price.

We get spoiled as parents having an IEP meeting with 12 people around and everyone looking at the parent because we have all of the background information. But then you get to adult services and we're gone from the picture. How have we handled this? I shouldn't say that he doesn't depend on us. He is very independent. He is very open with us. He does come to us for advice. I guess we're just playing the game and if something comes up, he'll run it past us. We will discuss it, talk it over, and then goes back and present a solution. It's basically our voice, but he is presenting it. That's the way we've handled thing.

Elissa Becker: Your story about the recorder going on the table in the middle of an IEP meeting brought back fond memories for me. It was about the same story, but that's not the question right now. So I will tell you that one later.

Anyhow, I think a very defining moment for us, Ruth and I, was after Ruth had completed her program at the Hiram G. Andrews Center (HGA), and we moved to Westchester, Pennsylvania, because Lori Hutchison said that's where you have to live, and I said okay. I had no idea where Westchester, Pennsylvania, was, but it did turn out to be a sweet town. We hoped that it had all of the services that Ruth would need after graduating from the most wonderful experience of her life. We were there, and lo and behold, we're told that we now have to contact the Office of Vocational Rehabilitation (OVR), and they will help Ruth find a job.

Well, the defining moment came when the people from OVR said, “Oh, okay. We don't know what she can do, and we're not sure if we have any placements for her, nor do we have any coaches that will be signing.” When all of this was presented to me, I said, “Okay. I think we have a problem here.”

Because of the model experience that I saw in New Jersey with a job coach, and because of that same model I saw going on at HGA, I found people that I would hire on my own and train them. That was how we moved forward, so that Ruth would have a reason to get up every morning and fulfill her need to be part of her community, and that's what we do.

We just sort of manage around the situation because truly the services that we've been offered in Chester County fall short of what I know should be because of my past experiences, and I know it's perhaps because of the fact that Ruth is also developmentally delayed and learning disabled that the OVR doesn't have the support team that we need. But we've gotten past it, and I am hoping that there will be more people in Chester County who can be serviced with all of their needs based on the fact that many telling this story.

Greta Palmberg: I will just add that you are starting a foundation in your daughter's name for support services

Elissa Becker: I started it about four years ago, but because of the terrible situation in our country, the federal government is very careful of who they allow who can become a 501(c)(3) corporation. I don't think that I look that tough, but it did take four years. Finally a year ago we got our certification from the federal government, and we are registered as the Ruth Becker Foundation for Deaf Support.

Our mission is to provide services in and around our community. That's where we would like to start. We'd like to offer these services to people very similar to Ruth with her needs as far as being profoundly deaf, deaf disabled, learning disabled, all of those things that don't stop a person from wanting to be part of their community. It doesn't stop a person from saying, what did I do today? How exciting--tomorrow I'm going to work.

It's important to give them sustained support, not 90 days which is almost impossible, but a sustained support for a longer period of time based on the fact that most of these clients also have the support of MHMR who have utterly no services for the deaf. So this would be a way to connect all of that and help these adults find a mission and enjoy going to work and succeeding. The end result is success.

Greta Palmberg: Janis, this is also a passion of yours.

Janis Friend: Yes, it is. I am just appalled when I hear that these service do not exist, because I work for Vocational Rehabilitation, and Ruth is the kind of individual that we are set up to serve. So I would like to invite you and Ruth to come to Kentucky, Just move to Kentucky and bring your foundation.

(Laughter)

Elissa Becker: Yes. You're bourbon country.

Janis Friend: That's right. I am right in the middle of it.

(Laughter)

Greta Palmberg: We've got a few more minutes, and I have one big question for the rest of you. My son went right from high school into the postsecondary setting, I think that I want to address that just for a moment.

Being a teacher I hope that I'm giving my son all of the self-advocacy skills that he needs at 17 and 18 to join the college setting. I tried the best I could, but he still is an 18-year-old, and if you have an 18-year-old they know everything and you can't tell them a thing. And they don't know what they don't know. But they know it all.

(Laughter)

That was a little scary for me. I was also scared to be labeled a "helicopter parent," and I have worked in my profession with helicopter parents, so I know what they look like, and I can feel the hover coming.

(Laughter)

I hope that none of the University of Wisconsin staff think I am a helicopter mom, which I don't think I am. But when my son got into college, I thought he had self-advocacy skills. I had no idea the level of self-advocacy skills that he would need on a big university campus. No idea.

Socially and emotionally, I don't think that I could have made him any more ready than he was. He did understand disability services and what he had to do there. He did not understand other places of the campus where he needed to go to other people. So when we arrived in his dorm room, as proud parents we helped to get him all set up in his dorm and we noticed a box that says "hearing impairments" on the bed. We open it up, and it's a TTY. It's like, okay, whatever.

(Laughter)

And so as the mom, I am just kind of suggesting to now this 18-year-old young man, "Hmmm, what's going to happen when your friends come by your dorm room? How are you going to know they're there?" In his brilliance he says, "I will leave my door open all the time."

(Laughter)

Like that's going to work for you.

We noticed that the fire alarm was outside the hallway. So as soon as he closed his door, the lighted fire alarm was gone. "Who are you going to ask about this? This is not working for you. Where are you going to go?" I asked. So he is at college and so excited to be there, and I am still self-advocacy teaching here. "Where are you going to go for this? What are you going to do for that?" He has done remarkably well, but there are things like that that come up all the time.

My last question to the panel, because I know our time is running out, is what suggestions or advice would you give to either families or to adult services? What are your little words of wisdom?

I guess I will start.

For the postsecondary setting, my words of wisdom would be as a parent, I feel it's my last chance when I come visit your colleges or call on the phone to ask about your services. That's my last chance, and then I get cut off. So if you could just not put on your blinders, "Oh, no, here comes a helicopter parent," and listen to some of the things that I am saying, because some of the things I am saying you are not going to hear from the student until they're failing. And if you would have just maybe listened and jotted a note down you would have known to catch up.

I think as a parent what I wanted to hear was at this college or university, "Here's our safety net. This is what we're going to do," whether it's, "We're going to watch their grades at midterm first quarter, not that we're going to let you know what they are, but we're going to follow up with your child if we see that things are not going right. We are going to send them e-mails to remind them to come to the disability service office."

So if I know what your process is, I'm the coach now on the sidelines. I had to do this with my son. I know he just registered for classes, so I am paging him, "Did you go to the disability service? Did you tell them what you need?" and I can be an advocate that way. But if I knew how your system worked and what was required of him, I could help more behind the scenes. That's my suggestion.

Melody Eubanks: When my son went to NTID, he started cutting the umbilical cord early, and he knew I was a helicopter parent. I landed when he was first born.

(Laughter)

He is just like his father, and God gave him the exact personality he needed. But when he went to NTID, he forced me to go to NTID. I thought, "You'll be fine at the community college in Georgia, come on." And he said, "No, mom. I want to go to New York and visit."

So early in his first experience at NTID, he started weeding us out. During the first three years we went and visited, stayed on campus online, finding out what he did, and kept up with him on the sidelines. I wanted to respect his independence. I wanted to respect the code of ethics that certain professionals have to follow. So it was easy because of the Internet to keep up with him and to reserve that respect for him.

But we asked questions and contacted his counselor once or twice. I remember the first year he came home, he lost 20 pounds. And I said, "You've got to go to the doctor. We've got to see what's wrong." Anyway, the doctor finally contacted me and said, "He is fine. He is just homesick. He is more worried about homework and socializing. He forgot about eating." But he is doing fine, and he has cut the umbilical cord and is learning how to stay focused. Be informed about the curriculum out there and the services. I've always told him even when he jumped from high school to college, if you need help, if you need tutoring, if you need note-takers, or if you need interpreters, ask. The services are out there. Grab them. Thank God he is in an environment that has the whole world opened up to him.

But you have to respect the teachers rather than creating animosity between the professionals; it's a learning experience for them. I used to think, "Well, they're on the other side of the podium and they know exactly what my child needs." But they don't. You soon find that out. And if you don't, then you are not doing your homework as a parent. You have to become informed. You have to know what's out there. Then you together with that team, regardless if it's K-12 or postsecondary, make that informed decision together. It's very important that you promote independence for your child.

Janis Friend: I'm trying to think back that far. My son is a little older, and you mentioned texting. We didn't have that.

Greta Palmberg: It's a great thing!

Janis Friend: I know. We didn't have e-mail when he started college. We didn't have texting, and thinking back to when he turned 18, he was still in high school. I do remember the first time that

somebody said something about Rob having an IEP meeting, and I was puzzled because I didn't get any information. And they said, "No, you wouldn't. He is 18." I had been going to IEP meetings since he was five years old, and they said, "He has to invite you, and he has to give us permission to share information."

Now, I had always pretty much been Rob's contact with the world because we communicated, so I was used to being a very integral part of his life. But I will never forget when he went to NTID that first day. We left him there. My husband and I drove off, and I can see him standing there on the sidewalk. And I cried all the way home. I mean, it's like this is my baby. He is there. He is alone. Does he know what to do? Will someone help him? Somehow he did.

He got what he needed while he was there, but I know that one struggle that he had was being mainstreamed in the '80s. He totally missed the deaf culture movement. When you have a deaf child going to a program for the deaf in a postsecondary setting like NTID or Gallaudet University, that can be pretty tough. He had some really tough struggles.

Weeks went by and I didn't hear from him. We didn't have text messaging. I was a rehabilitation counselor for the deaf at the time in Louisville, and I was frantic. I was just totally frantic. Linda is sitting here smiling at me. She knows my son. Finally I called someone I knew at administration at NTID and I said, "I haven't heard from my son in two weeks. I have no clue what's going on. I am going crazy." So she went down to his class, got him out of class, and said, "Come to my office and call your mother."

(Laughter)

Talk about a helicopter parent.

I said, "Son, why haven't you called me? What's going on?" He said, "I've been busy and having fun."

(Laughter)

So I knew he could get along without me.

Greta Palmberg: All parents feel that nervousness when they drop their son or daughter off at college. I do think that we have an extra level of nervousness.

I remember when we dropped my son off. We were taking him to the bookstore, and I lost him in the hallway. Age 18 just found him and all of a sudden he is signing to all of these girls. And I'm thinking, "Okay, looks good."

(Laughter)

Then you do the parent thing. You take him out to dinner, the last supper.

(Laughter)

So you take him out to dinner, you bring him home. Back at the dorm room there are three notes on his door from three girls in interpreter training with their room numbers and phone numbers.

(Laughter)

E-mail addresses. I looked at my husband and said, "We can go now."

(Laughter)

Sally Prouty: When Andy was born, he was fortunate that he got his diagnosis of being deaf-blind, right away. He was just under a month old. It wasn't so fortunate for us. It was really hard, but we won't get into that. We're talking about the other end.

My husband and I educated ourselves. We learned. We became involved in the deaf community. We belong to a deaf church. I went through an interpreter training program. We got to know adults who were deaf. We got to adults who were blind. We got to know adults who were deaf-blind.

Although we met very many successful people, there was also the population who didn't work, and who lived on SSI. We were bound and determined that this was not going to be Andrew's path. We just looked at an old videotape. We were interviewed when we lived in Oregon. Andy was a baby, and we said that he would be a tax-paying citizen. We didn't know what was between what happened then and where he is now, but that was always our goal.

So my advice to give new parents is that it's never too early. At age 14 when they started saying it was time for transition, I thought, "Oh, my gosh. He is only 14 years old." It could have been started earlier.

So what we started doing with Andy and all of our kids is that we gave them chores. Along with chores came money, just like a job would provide money. Then by the time Andy was in high school he wanted a part-time job. He wanted to earn some money. So we immediately went to our rehabilitation agency, and we said, "He would like to work." And they said, "Okay." Well, that was our cue that whatever is going to happen is going to be from us. So we were instrumental in finding Andy his first job.

He wanted to be a baker. He loved baking chocolate chip cookies, and he was going to be a baker, by golly. We walked into our bakery and the sign said "Help Wanted." We talked to Andy about it. He said, "Let's go." He went in to interview, and they hired him. It wasn't for a baking job but it was as a dishwasher. But it was a start. He got his foot in the door, he made money with hopes of becoming a baker. There were two owners of the bakery, and she had a sign language book and she was awesome. The other partner worked at night and did the baking. We thought, "He doesn't have to deal with the public, it's just the two of them, and they can bake their hearts out all night." But we got this kind of hesitancy. Finally we said to the other partner, "Mariah, what's going on?" She said, "You know what? My partner is concerned about communicating with Andy." We said, "It's not a big deal. There's not going to be a lot of communication. They can just write back and forth." And she said, "Well, that's good for Andy, but you know what? My partner is illiterate." Now, what's the likelihood of that?

(Laughter)

So he decided, "All right, I am not going to be a baker, I have to find something else."

The next job was another job that, again, was connections that the parent made. Our assumption was going into this like into the IEP world of school people are going to help you and do things for you. We thought people would bring Andy jobs. That just isn't the case. I would encourage all parents to use whatever connections they have in the community because you are the connection.

Andy's next job was from a neighbor who had a sister who I think is 55 now, and she was a preemie. The doctor out on the farm in Iowa sent her home in a shoe box thinking that she was going to die. Well, she didn't die. She grew up and she was deaf-blind. Our neighbor said to us, "I want to give Andy the break that my sister never had." It was our connection with that person that made that happen.

So my advice would be that it's full-time advocacy. My motto has always been "Be respectfully demanding."

Elissa Becker: Coming from New York, I say, "Be demanding."
(*Laughter*)

Sally Prouty: We have a term in Minnesota and it's called, "Be Minnesota nice."
(*Laughter*)

Elissa Becker: I think that my advice to parents would be to listen to your child. With someone like Ruth who needs continuing support, listen to what they're asking. Then go out and help them find it. They have the answers to what they need, and that's another success for them.

Just getting the right answers and knowing people are listening to them is important, even though it comes through another mode called "mom" or "brother" or "cousin." It really doesn't matter. Just get them out there and let them ask. Help them get their answers.

Greta Palmberg: Well, I just feel honored to be sitting on this panel with these other women who brought their children to a level of success that maybe others never thought they could attain, and with the help of wonderful support services. All of you women are doing things now in your career life to help other deaf and deaf-blind individuals meet their success. That says a lot about you.

Because I am a teacher and I sat on the other side of the IEP table, I think my experience changed the way I sat at that table. I always thought about the parent. What information did they need to know for empowerment? Did they understand everything? Should I slow down? Should I describe all those terms that I am throwing out that I'm used to saying? They have no idea what I mean when I say "community rehabilitation" or "vocational rehabilitation" because they don't even know what those are.

I guess my suggestion is for those parents who have trouble or are not advocating, it's our job as service providers to give them the information to empower them to help their deaf and hard-of-hearing and deaf-blind sons and daughters achieve what they can.

At this point we've got about 15 more minutes to go, and I would like to open it up for questions from the audience. If you have any questions you would like to ask of the panel, please remember to come up and use the microphone or stand up here and sign. So do we have any questions from the audience?

Audience member: Good morning, everybody. My name is Tom Dean, and I am originally from Cincinnati, Ohio, but I live and work in Louisiana now. Hearing you all speak reminded me of my own transition story way back when, when I first left Ohio, went to New Orleans to go to college. I'm hard-of-hearing. I grew up hard-of-hearing, I am hard-of-hearing now, went to all hearing schools, but I guess I give you the story from the flip-side. My mother and I drove down to New Orleans from Cincinnati. She dropped me off for college there. And I had to take her back to the Greyhound bus stop for the long ride back to Cincinnati. I guess it was when I knew them that the umbilical cord was really cut. I just want you to know that it's not only bittersweet for the parents, but it's bittersweet for the students as well. Thank you.

Audience member: I have a question from another point of view. I know that it's not any kind of situation where the interpreter would be in the position to be pitied, but as an interpreter and in

working with deaf students at a college and meeting their parents, there are many times when the deaf student will ask me, “What did she say,” or “What did he say,” because their parents don't sign. Of course, I know that in most cases, in many cases, the parents and child have very loving and close relationships, and that the parents feel a real connection with their children. But as an interpreter, I feel a little intimidated in that situation. I feel a little uncomfortable, but I'm not going to tell them how to run their lives. Have you ever seen that, and what advice do you have for the interpreter?

Panelist: Thank you. That's a great question. I work in a transition program for 18-21, and we work with a lot of refugee families. Maybe they didn't learn sign language in their native country for their child and their child didn't learn it there either. So they come to America, and they have other children, and they're trying to fit into the American culture. At our IEP meetings, it's the only time where we have maybe a Somalian interpreter, or a Hmong interpreter, and a sign language interpreter.

For me as a teacher and a mom, the parent never gets this communication set up at other times. So there are times when families have family issues to discuss and we will extend the IEP meeting. Everybody will leave and let all of the interpreters stay so that family can have a discussion that's not afforded to them any time else. Is it the perfect situation? No, but I'd rather give them a time to communicate than not at all. So I understand the awkwardness of being in that situation as an interpreter, but those are golden moments for families, and I thank you for being a part of that.

Audience member: I would just like to say that I loved your presentation, and the love for your children just came through. But I think that it's parents of middle school people who need to hear your message of today. I think that it would be a great idea if PEPNet could somehow - even though they're funded for college-level services - took this and turned it into a CD or a DVD and middle school parents could hear it. Thank you.

Panelist: I think that would be our advice to all. Start early! We didn't start early enough.

Audience member: First of all, I would like to thank each and every one of you for sharing your stories with us this morning. As a parent, I have been a very untraditional male in that I have been extremely hands-on in raising my son. I would like to know what part or role your husbands played in this process, if you could share that with us. Thank you.

Panelist: I would like to tell a funny story about my husband. My son is just like my husband, thank God. They knew he didn't need my emotional side. When my son was about six years old, my husband and I were tired of hearing, “No, no, no.” We wanted our son to grow up and experience the normal things of the hearing world. My husband signs, but he doesn't sign as proficient as I do, if you can call mine proficient.

But anyway at six years old they both came in, and my son said, “Mom, I signed up for baseball.” And I looked at my husband, and I had this look on my face like a deer caught in the headlights. “You did what?” I asked.

He said, “We signed up for baseball.” He was signing to me. “We signed up for baseball, Mama, and I start on Saturday.”

So I took my husband aside and I said, “Well, did you tell them he is deaf?” And he said, “No, why should I?”

Wow, that was a light bulb moment for me. It finally came on. Why should that hinder him?

So at that point my husband jumped right in. He said, "I am going to become assistant coach." And everybody loved him. I'll never forget this: At one point one of the coaches said to us, "I wish sometimes that all of my other players were deaf because they didn't have to be focused on."
(*Laughter*)

My husband was the breadwinner; we married young, at 21, and had a family, and we had big dreams. When Steven was born deaf, a boomerang was thrown in it. But my husband always had to be the one that worked. He went to college, worked third shift, lost a lot of sleep, but he was there. He was the support. He was the backbone of the family. I was the one doing the things, but he was the one to do this. He needs this. He was the silent, strong partner and continues to support us today and has given my son his attitude that don't give up. They tell you no; you find the yes.

Panelist: My husband was also very involved, and he learned to sign. He didn't sign as proficiently as I did because he wasn't around Rob as much. I was a stay-at-home mom when Rob was growing up when he was young. But they had a very, very close, very loving relationship. My husband was always there, and they did things when and if as they could together. My husband passed away this past fall, and it's been very, very, very tough for my son because he just idolized his father. They just had such a close relationship. So that's a big gap in his life right now. But he was very, very involved and very important to my son.

Panelist: I had the luxury of staying home with the kids, so, of course, I was more involved. My husband... I couldn't do what I do without him. He is my rock of Gibraltar. He has hired employees who are deaf so his signing skills have improved. But, again, he is not around it as much as I am. So, yeah, he has been involved.

Panelist: My husband is a techie, and I am a teacher. So we divided and conquered. He has kept up with all of the latest technology. When the Sidekick came out, I don't know if my son could text, but he had one. We've got the closed captioned hooked up on the TV, learned how to use the TTY, the computer is all set, hearing aids, that was his piece. So each of us took a piece and it worked out as a team that way.

Audience member: Thank you. My compliments to Greta and the panelists for a whole host of magical moments and a great conference. My question is for systems relationships and systems change. I am glad to hear that about FERPA, but we know that there are often gaps in what's desired, what's planned for, and what the systems -- vocational rehabilitation and postsecondary education -- can provide.

So this question is similar to what I asked the younger people yesterday: If you could change one thing, if you had magic to change one thing about systems in the relationships, what would you change?

Panelist: The only system I am familiar with is the vocational rehabilitation system. But if I could change anything that would better service the needs of the deaf people today, it would be where everybody from a professional viewpoint or standpoint -- a teacher, sign language interpreter, a speech therapist, a bus driver, those that are in constant contact with our kids -- are familiar, and they know their needs. They see their individual needs.

Because of bureaucratic guidelines and rules that are put in place, they are limited by their own code of ethics to go and spread this is what the kids need today. I had people come to me today to

say, “We need you advocate for the Georgia high school graduation test, the instructions to be, you know, interpreted.” I had to go out and petition, but I couldn't reveal to them and publicly thank the person who told me because it was against the code of ethics for them to speak for the deaf child.

I am so grateful that I was able to have that open opportunity, that open door with professionals, and they knew I was a parent there for my child. But I wasn't just there for Steven. I was there for them. I was there to help them facilitate their career and deaf education. They all knew my child better.

So if I could change anything, I would open the doors for proper communication to facilitate the needs of the deaf children and make it all right for everybody to communicate and not be threatened that they would lose their job.

Panelist: I would hope if I could do something that's really magical, I would love to see a joint meeting between MHMR, OVR, and all of the adult programs that are out in the different communities.

There are so many, so many deaf adults who have so many other labels attached to them now. There is truly no place to be social, no way to join together because the deaf are so separated from the other disabilities. It shouldn't be that way.

Greta Palmberg: I guess there's that magic line that's more like a chasm between K-12 and anything happening as an adult. I feel like throwing the child over the chasm and telling them, “Now you are in this world.” I wish we could bridge that better.

My son is very bright, but we struggled, struggled, struggled just to find him a high school job. And I needed help to do that, like Sally had to use family connections to do that. It would have been so nice if VR had some summer jobs for 16-year-olds or 17-year-olds to start building their resumes with employers who were used to working with the deaf so it would be a gentle start. They can't learn job skills in a place where they're teaching everybody about deaf culture. So that would be mine.

Thank you so much for coming to our panel discussion.
(Applause)

Sally Prouty: I want to thank you all for being here. Without you, we wouldn't do what we do.

Elissa Becker: I want to thank the students here yesterday, and listening to them. Kudos to all of you for bringing them there.
(Applause)

25 Years Later: Board of Education v Rowley: A Look at the Past and Looking Towards the Future

Amy Rowley

Abstract

Amy June Rowley shared her personal experience as a child caught in the middle of a special education litigation when her parents and her school district went to court regarding the issue of whether or not an interpreter was necessary for Amy to receive a Free and Appropriate Public Education (FAPE). In *Hendrick Hudson v. Rowley*, many issues were encountered and many directly impacted Amy's experience in school. Participants had the opportunity to analyze the information shared and see the transition from 25 years ago, when the Supreme Court decision was made to now. Amy June Rowley is a parent of deaf children and her experience in the case impact the decisions related to her children's education.



This is the kind of article you don't normally see in these kinds of publications. I have read many articles over the years and find that almost everyone has a scholarly perspective on the Rowley case. When I have a chance to talk with people about what they have read and what opinions they have developed as a result of these readings, I often find that the perspective that they have adopted is directly influenced by the readings. However, almost none of the articles published to date offer a personal perspective of Rowley.

As the child who grew up in these cases, I want to share my personal experiences. Not everyone will agree with my perspective, however I am not looking for sympathy or support. This is my story and not anyone else's story. What I hope readers will get from this is the understanding that in everyone's best interests, something will happen that is not in the best interest for the student caught in the middle of a special education litigation. The same is true for a child or children caught in the middle when parents are going through a divorce. Everyone wants to do what's best for the child, but everyone has their own ideas about what is best, which sometimes causes conflicts. I will show in this paper what some of the conflicts were and how I was caught in the middle at times. My comments in italics are exactly what I remember from that time.

A brief background on my parents and their educational experiences is essential to understand the full scope of things that were to happen regarding the Rowley cases. Clifford Rowley was a graduate of the New York School for the Deaf (Fanwood) in White Plains, New York which is not far from where the Rowley controversies took place in Peekskill, NY. Clifford Rowley is the younger child of Elmer and Thelma Rowley, who are hearing. Clifford was born as a healthy

hearing baby and became deaf shortly afterwards from an onset of meningitis. At the time, his parents contacted the New York School for the Deaf and inquired about educating their son. Elmer and Thelma were advised by educators of the deaf at the time that oral education was the way of educating the deaf and that they should not learn sign language if they wanted Clifford to be successfully integrated into society. Clifford was placed into a special program where all deaf kids did not sign; they were housed and schooled separately from the other deaf kids attending Fanwood who already signed. Administrators at Fanwood felt that the deaf kids who signed would prevent the new only-oral kids from learning to speak thus segregating the signers from the non-signers. However, this "experiment" was short lived as some deaf children in the oral-only group were from deaf parents and had already seen sign language even though their parents had only talked to them and not signed. But people back then did not know language could still be acquired from watching; therefore those deaf children from deaf families were able to successfully pass on the language of deaf people to those oral only children from hearing families. This is how Clifford Rowley learned ASL and the segregated program was soon declared a "failure" and the project was abandoned. All of the students then joined the rest of the deaf students in the Fanwood School and dormitories. Clifford Rowley grew up as a signing deaf person and was educated with full access to sign language, but his parents never learned to sign.

Nancy Rowley grew up in Rochester, New York and was born hearing. By the age of four, Nancy was struck with German measles and started to lose her hearing. By the age of 13 she could no longer talk on the phone and struggled with communication in school and with friends. She learned to read lips and her mother mostly filled her in on what was going on. As she became older, she learned of a college for deaf students in Washington DC. So she decided to attend college there upon her graduation from her Catholic high school. However many students at that college, Gallaudet College, knew sign language and she did not so she tried to learn as much as possible after she arrived at college. She eventually met Clifford and the two of them began courting. She graduated since she was older than Clifford, and attended a Master's program at Gallaudet to become a teacher of the deaf. Upon her graduation from graduate school, she moved to Pennsylvania to teach at Pennsylvania State Oral School (PSOS) in Scranton. The Headmaster from PSOS met with Dr. Powrie Doctor who ran the graduate program at the time and he explained to her about the importance of sign language being used in class. The headmaster interviewed and hired Nancy who felt very uncomfortable teaching orally due to her own experience of how frustrating it was in school. The headmaster gave Nancy her blessing to teach whatever way she wanted. Instead of wasting students' time, as she valued the opportunity she had to teach them, she used sign language in her classes and her students prospered greatly. A few other teachers from PSOS were also attending Gallaudet for their Master's degrees during the summer times, so PSOS made the transition from being an oral school to a deaf school that used sign language. After Clifford graduated from Gallaudet, the two of them moved to New York to start a new life there as a married couple. Nancy worked at Fanwood while Clifford worked as a chemist in nearby Ossining.

During her tenure at Fanwood, she saw how much potential many deaf students had and pushed her students to achieve and be the best they could be regardless of what others thought. Fanwood was considered to be one of the best schools during this time. However the environment at many deaf schools was that many other teachers there thought less of deaf children and thought that their being deaf equated with them not being able to achieve or learn adequately. When students transferred in to Fanwood from other schools, there was an obvious gap in the education of students transferred in and students who grew up at Fanwood. Despite Fanwood being one of the better schools around, students were still dealing with an educational gap compared with hearing schools because most students did not come into school with a language foundation from home. This was not always the case with deaf education but became more predominant in the 1880's and

1890's when Alexander Graham Bell pushed for the rise of oralism in American Schools. He is well known for his invention of the telephone but his passion was trying to assimilate deaf people into a hearing world. While he was trying to make a hearing aid, he invented the telephone instead. (VanCleve & Crouch, 1989). Bell helped the rise of oralism prosper and the focus on learning English by reading and writing shifted to learning to talk and read lips or use any residual hearing you had left. With that mindset, many deaf educators came in with a little purpose of teaching deaf children academically but pushed them to succeed vocally. This was still the method of teaching in the 1960's when Nancy Rowley first entered the education field. This may seem unique to Fanwood, but this is not the case. This was the general consensus of the environment at deaf schools at the time (Lane, 1999). Since oralism was supported by Bell and many others, many parents with deaf children never learned sign language thus their deaf children often had little or no language foundation when entering school. This automatically puts all deaf schools on an uneven playing field against hearing schools.

Deaf education has always had a lot of problems and continues to do so. Many other scholars write extensively on this topic and I will not delve into this here. The ground work for a shaky environment for educating the deaf had been laid and Nancy Rowley experienced this as a teacher and a former deaf pupil taught orally. Clifford Rowley experienced this as a student and as a deaf child with hearing parents who never learned to sign. Eventually Nancy Rowley left the teaching profession to raise her children at home. Her first child, E. John was born hearing and she communicated with him using her voice because she believed a hearing child needed to be successfully assimilated into a hearing world. If she used sign language to communicate with him, would he still fit in with other hearing people? She did not have any knowledge to support or contradict this so she always talked with John. A few years later I was born and she talked to me the same way she talked with my brother, John. It was not until about 15 months later she noticed I did not pick up on speech like my brother had. I also started signing because I had seen my parents sign with each other. Since both of my parents were born hearing, it seemed to be genetically impossible that I would be deaf, but Nancy had this feeling she could not shake. She knew I was deaf and made an appointment for a hearing test. But the appointment would not happen for several months. At this point, there was no time to spare and she dove into her former role as a teacher. She made sure I was always signed to and I always understood everything that was going on. She would continue with this role as my teacher for many years to come.

After the hearing test confirmed that I was indeed deaf, my parents started discussing what educational options were available for me. At the time, it seemed Fanwood was the only logical choice. I could also attend my local elementary school but that would mean I would have no access to the class because no one would be signing. That was an option that was unthinkable since Nancy Rowley remembers so clearly and vividly what frustration she went through in school without knowing sign language. It was only until she arrived at Gallaudet and learned sign language that she felt her world had been opened up with full access to information.

Shortly afterwards in 1975, Education for All Handicapped Children Act also called Public Law 94-142 was passed, which opened the door for disabled children to receive free and appropriate public education (FAPE) in the least restrictive environment (LRE). My parents looked at this new development as an opportunity for me to be mainstreamed and receive an education like other hearing students. Nancy Rowley certainly thought this was a better option than the deaf school because after she learned I was deaf, I was progressing normally like other hearing children with hearing parents were. I was not part of the 90% statistic where 90% of deaf children come from hearing families and often are language delayed because their parents won't, don't, or can't learn sign language. Being in the 10% population, I was lucky to always have access to language. Even though my parents did not sign directly with me until after 15 months old, I could see them using

sign language and was able to acquire it anyway. If I attended the Fanwood program, many of my peers would be part of the 90% population and would most likely be language delayed. Compounded with that information, plus the knowledge of working at Fanwood, Nancy Rowley could only imagine that the local school would become the better option along with getting necessary accommodations. My parents would not be accountable for the financial burden of providing services since PL 94-142 outlined the premises for providing children with disabilities as part of FAPE.

Nancy Rowley communicated with the school about her desires to have me attend the Furnace Woods School and they responded with willingness to provide necessary services for me including a sign language interpreter. John was already attending school there and she was able to follow up with them about making necessary arrangements. Furnace Woods had a TTY installed which is what deaf people used at the time for communicating with other deaf people over the phone. Since my parents had a TTY at home, the school could call them anytime. While the staff and administrators at the school seemed to be very sincere about wanting to work with my parents, they were still a part of a bureaucratic system, Hendrick Hudson School District, which required them to report to the Superintendent.

When I started kindergarten, Nancy and Cliff fully expected that an interpreter would be present for my class. When there was not one, my parents inquired more and this set up the tension between the school district and my parents. Nancy and Cliff Rowley only wanted what they thought was best for me which was a sign language interpreter to fully understand my teacher's spoken words. Hendrick Hudson School District was advised by their lawyer to exhaust all other options first. My mother was not willing to put my education on hold while everyone could agree on exactly what I needed. She talked with my teachers every day and made sure at home I learned what was taught at school. In every sense of the word, I was home schooled but I was also attending Furnace Woods School.

Eventually an agreement was made to have an interpreter placed in the classroom on a "trial basis." The agreement called for an interpreter in the classroom for four weeks.

One day this man shows up in my class. I know he is the interpreter because my mom has told me he will be coming. But I am scared. I don't know what an interpreter is. I have never seen one before. I am only 5 and I don't know what I am supposed to do with him. He also looks scary. He is very tall to anyone who is little like me and he is wearing normal interpreter attire of all black clothes. But I don't know that white interpreters wear dark colors to contrast with their skin color. No one in kindergarten is wearing all black so there must be something wrong with him. I am even more scared. I am only so eager to walk away and keep myself occupied with other doings. Once in a while I quickly steal a glance at him and see him signing. I wonder why. I did not understand that he was signing what the teacher was saying.

To further complicate things, there were several observers in class and I knew somehow they were there because the man in black was there too. I could not wait until the entourage and the oddly dressed tall man left my kindergarten class in its normal state. As a result of my behavior, the interpreter was taken out after two weeks, two weeks less than the agreed-upon timeline. The tension between my parents and the school district was heating up.

I can feel it, but not from my parents. I feel it at school.

It is not until years later I fully understand the matters that took place but I can piece together what I remember with what I learned later. I progressed into first grade and had Mrs. Globerman to lead me through the year. She was very different from my kindergarten teacher. She didn't teach me or make sure I was following everything. Since I was already a good reader, I recall always working on my basal worksheets. I can't remember ever doing anything else in her classroom, but I am sure I did. What I do remember is that there was a steady stream of visitors and I could clearly see the displeasure that all of the visitors had on Mrs. Globerman. It was almost as if she lost all control of her classroom and who felt the brunt of her frustration? Me. I had a teacher of the deaf, Sue Williams, and she was scheduled to pull me out of class to make sure I was able to follow along in class, and what I could not follow along with, she would teach me. I greatly resisted these meetings because it drew more attention to me and made me look like I was totally responsible for all the disruptions going on in Mrs. Globerman's class. As R.C. Smith writes in his book, *A Case about Amy*, he was able to take excerpts from Sue Williams's diary and it clearly showed my frustration. One such entry for February 16th, 1979 shows the dialogue that took place between Sue Williams and myself.

"Feb 16. Had a heart-to-heart with Amy, who acted as if she didn't want to come with me. I asked her how she was feeling.

"I feel bad," Amy said. "I don't want to come with you."

"What's wrong?"

"I don't know."

"Amy, what did you think of the man who visited yesterday?"

"I don't like those things."

"What do you mean by 'things'?"

"All of the people coming."

"How does your mother feel?"

"She thinks I need an interpreter because I don't understand anything."

"Amy, you seem to understand things, not everything, but most things."

"Yes."

"Do you understand Mrs. Globerman?"

"Yes, everything she says."

"Well, what don't you understand?"

"I don't understand library."

"You mean the stories? You don't understand them?"

"Yes."

"You want to understand what's happening right?"

"Right."

"What about movies?"

"I don't understand them much." (p. 32).

I remember so well that I always insisted I understood everything. This was a defense mechanism I employed in hopes of everyone leaving me alone and things would just return to normal. This is an interesting concept for me to think about at this point of my life because I have never fully been exposed to "a normal classroom environment" so why did I resist everything so much? I don't know for sure, but I suspect I was able to pick up on body language and emotions better than I was able to pick up spoken words and the emotions made a big impact on me when I could see others not being comfortable. One thing I do know is that I preferred to be with the other students all the time and not being constantly removed from class to meet with my deaf education teacher or going to speech class or leaving for testing. Sue Williams really picked up on this feeling and tried to keep me in my class and work with me in class so I would not have to be taken out. However, while this was an ideal situation for me, it was bothersome for Mrs. Globerman since I was no

longer paying attention to her but working with Sue Williams and that was very distracting for Mrs. Globerman (Smith, 1996). Additionally, parents were complaining to Mrs. Globerman because Sue Williams was using sign language in the classroom with me. I seemed to be the only one who wanted to stay in the classroom but no one would let me stay.

When I moved into second grade, many of the frustrations I experience did not quell. I reacted by continuing to resist and act out.

During second grade tensions are at their highest. I am very aware of things happening all around me. Before the principal, Joseph Zavarella would come to my class occasionally, but now he comes to my class every day. My parents have already won one hearing at the federal level and an appeal is under way. Every year my parents have an IEP meeting with the school and every year my parents refuse to sign it because there is nothing on it related to provision of interpreting services. But the rest of the stuff on the IEP is the school's defense for trying to provide me with the best possible service they think I need (without an interpreter, of course).

Topics on the IEP included me having speech to improve my ability to have others understand me. It didn't help me understand others though. Wasn't that the point? I was required to wear an FM system with the teacher wearing a microphone. What's very interesting to me is that the FM system certainly amplified everything I heard but I still understood nothing. I think it is difficult for hearing people to rationalize that hearing aids and FM systems are not the same as eyeglasses. I imagine the noises I heard everyday sounded like loud power tools to hearing people. They constantly bugged me and I was happy to turn them off. I recall many times I watched the teacher and noises in my head certainly did not help. I remember reading that the school contested I had a lot of residual hearing so they felt it was their obligation to make sure I was able to use it. That comment was like a light bulb moment for me; it showed me how much hearing people really don't understand what deaf people actually hear. Every deaf person has a different audiogram and every deaf person reacts differently to their environment. If two deaf people with a similar audiogram were compared based on their audiograms only, one would find a lot of similarities. But if one looks at both people and sees how they function and how they communicate, the audiogram is often not an accurate representation of who deaf people are.

I do remember being "busted" a few times when I left my FM system off intentionally. I would always see a face either from Miss McLaughlin, my 2nd grade teacher or Dr. Zavarella, my principal. A facial expression by itself is worth a thousand words and I certainly got much more from those displeased looks than I got from all the static and garble being incessantly blasted through my FM system. The use of the FM system was the school's way of saying we are providing Amy with the things her IEP says she needs to be successful. But with the FM system, it brought so much attention to me and I felt like I always had a thousand eyes looking at me the whole time I was using it. It did not help having constant observers in my classroom. It was usually the principal, or some other expert witness the school or my parents hired.

I was also going to speech class and it didn't bother me too much because I wasn't going alone. A few of my other classmates were going to speech with me so I didn't feel singled out like I did with the FM system. Eventually, the number of students going to speech decreased. When it was just two of us left, I made a comment to my speech teacher, Mrs. Pasierb about how I was excited to be "graduating" from speech soon as my other classmates had. I doubt it was her intention to riddle my dreams with a barrage of arrows like she had but I never felt so discouraged after she told me because I am deaf, I will always need speech forever. I still remember that today as one of my most painful moments in school. It was the first time I fully understood that I WAS THE PROBLEM, I

WAS THE REASON behind all of the fuss going on. From that moment on I hated speech classes. I knew it was not for my benefit but to simply say that “everything had been done” to help this poor child.

With second grade out of the way and on to a new start in third grade, the overall environment improved for me because for now the school and my parents stopped fighting. They never really did stop but it was no longer obvious anymore. There were fewer disruptions to my class and we settled into everyday routines easily. The school district lost the first case and the appeal. After they lost the appeal, the school district was required to provide an interpreter. Having an interpreter in class could be considered a “new distraction” but the interpreter quickly inserted herself into our everyday routine and soon enough myself and my classmates could not imagine our class without her. For the first time I really enjoyed school, I was able to follow along perfectly in classroom discussions, and my interpreter made sure to interpret everything including my classmate’s discussions. My interpreter, Fran Miller, had deaf parents herself so she grew up communicating in sign language. Not only was she fluent in signing, she was also a skilled interpreter and fully understood how to be a language mediator. She did just that, mediated language between the other students, the teacher and I. I felt friendships blossoming and I could communicate and follow group conversations. If anyone asks a hard of hearing person, or a deaf person who lipreads solely, it is very difficult to follow a conversation involving several people. Most people in this situation would rather conduct one-on-one conversations where they can control the flow of information to make sure they can understand what is being said. Since I was fluent in sign language, the interpreter opened up a new avenue of complete accessibility for me. I enjoyed school now and I looked forward to recess where the interpreter would follow me out and interpret for me and other children to figure out what we wanted to do. Before I had always followed other kids outside and usually kids wanted to play kickball but I was often not included. So I would go to the playground and play alone or with a few other kids. But now, other kids were discussing in a group (which I could now be a part of since the interpreter just went ahead and interpreted those conversations) what they wanted to do. I felt I had a voice because I could say I wanted to play kickball and they would make sure I was involved. Third grade was a really good year. The added bonus of having an interpreter in the classroom meant that when I got home from school I only had to do my homework and not relearn everything I was supposed to have learned in class that day. So I really had a lot more time to play and “just be a kid.”

While school seemed really good and life “seemed back to normal” that wasn’t the reality. Things were actively brewing in the background. My brother had transferred to a private school about 20 minutes away. It was too difficult for him to continue to be enrolled in Furnace Woods Elementary. Many of his classmates and their parents did not understand what was going on between my parents and the school district and there was a lot of hostility towards John, my brother. He is the only hearing person in my immediate family and he was able to clearly hear and understand the comments from people around him. I am sure my parents and myself had people making comments around us, but we were not as aware of it as my brother was. While RC Smith was researching the experiences of everyone involved with the proceedings, he was able to find notes of people who came to visit the school and witnessed such hostilities. One such note from Mary Sheie comments about how she wondered “how surprised she was at how much anger there was in the classroom and in the principal’s office and how calmly Nancy had taken it” (Ibid., p. 36). This was written in reference to a visit by one of the expert witnesses that my parents had used in their trial. Of course it was okay to have the school’s witnesses in the classroom but not my parent’s witnesses? During that same visit Mary Sheie visited Dr. Zavarella’s office with my mother, and Dr. Zavarella practically scolded my mother because the school had provided so many other things such as the TTY and the FM System and never once did my mother say thanks. There was so much anger going on because so much was being done but it was not the one thing my parents asked for.

John transferred to a new school and he found that his problems followed him there as well. While the problems were not exactly the same, they still existed. Students made fun of him and picked on him because his family was different, we were all odd. *Who else had a deaf family? Probably no one else.* Deaf families are a rarity in itself and having one hearing child and other deaf children are even more of a rarity. Most deaf people have several hearing children and those hearing siblings with deaf parents are able to support each other while John had no one. Even as siblings, we were worlds apart; we were fighting the same battle but separately, which was almost like we were not struggling against the same thing.

When my situation had improved, it was almost as if my parents finally had the time to address his situation. But in reality the damage was done and the resentment that the school district and the community had towards the Rowleys was there, probably forever. People who had direct interaction with my parents or me were very supportive but others who saw us on TV or read about us in the newspaper felt so strongly that we had no place in the school.

Early in the proceedings, the school felt clearly that I should have attended Fanwood so they would not have to be responsible for the costs of supportive services. However as the case progressed, the positions changed. One of my many observations and testings was from psychologists. The school hired their own psychologist for different kinds of testing including IQ tests. Their psychologist did not sign so my parents challenged the validity of their results and got their own psychologist who signed. The results of the tests were different and it was admitted into evidence that I was very smart and I was a high functioning child with a lot of potential. The school district could no longer support that I would be better off at Fanwood when I was on grade level and would be ahead of many deaf peers who did not learn anything until they entered school, even though Fanwood was considered to be a good school. A few years ago I was asked to be a part of a psychological study for a deaf woman's post-doctoral project. In this study I was asked to take an IQ test and it was eerie because I remembered many of the questions. I had taken the test so many times that it became too familiar for me. Someone told me once that a person's IQ never changes but the more the school and my parents argued about the validity of the test, the more often I was given it and my score improved every time. I was not becoming smarter obviously, but I was becoming a smarter test taker. I observed things in pictures and was able to remember them and then the next time I took the test I could look for other things since I had remembered other things from a previous test. When I was older, one person made a comment to me that one thing I noticed in one of the pictures was one thing that no one ever noticed and, of course, I remembered that. After that, I always watched for the reactions on the faces of the people who gave me the test. I'd like to believe they knew it was impossible for me to be that smart but I had outsmarted them and beat the test. I don't know if that's true or not, but I do know that these types of tests are not designed to be given every year or even twice a year which was often the case. These tests were a tool for the school district to try to show that I was not as "smart" as my parents claimed me to be so there was no reason to provide me with an interpreter since I was passing in classes with above average grade. But that backfired with each test score improving and with my parents being able to get better results with a signing psychologist. I don't know why the IQ tests continued, but the controversy between my parents and the school district was far from over.

I entered fourth grade and things were different yet again. I had an interpreter still because an appeal wasn't made yet. But Fran Miller was not my interpreter anymore. In fact I didn't have an interpreter, I really had a teacher of the deaf. The school argued that I still needed to be pulled out for some one-on-one time to make sure I am following everything so their rationale was that my teacher could "interpret" what was being said in the classroom. Beth Freed was very nice but I missed Fran Miller. Beth Freed was a teacher and only told me what the teacher said. I did not

know what my classmates were saying and I was left to fend for myself at recess. I went outside with my FM system, but of course, I hated the FM. I couldn't play with that big bulky thing wrapped all over my body. One time I was on the swings, but instead of swinging in the direction towards the playground, I decided to swing towards the fence towards the marsh behind the fence. I swung and swung as high as I could. My FM was loose anyway because I never wore it tightly against my body since it was already uncomfortable. The FM swung right off and pulled the earplugs right out of my ears. I laughed in delight when it went over the fence and landed in the cattails. Since I was quite a monkey back then, I could have scaled the fence easily and jumped in the water/mud combination and picked up my FM. But why would I ever want to do that? No one else knew how miserable that thing made me. I was perfectly happy with my hearing aids and even more happier with an interpreter, a real one. Now I didn't even have that anymore.

The school district had taken away Fran Miller because she had too many connections to the deaf community because of her deaf parents. She was a threat and was seen as being too close to my family. The school district had to cover their bases and make sure she wouldn't be testifying against them in court if an appeal was granted.

In March 1982, when I was still in fourth grade, the US Supreme Court heard the oral argument between Hendrick Hudson School District and my parents. My parents lawyer, Michael Chatoff who was deaf himself, was the first deaf person to ever make an argument before the Supreme Court. He became deaf during law school from tumors on his auditory nerves. The surgery cut his nerves and he became permanently deaf. He struggled with neurofibromatosis but it didn't stop him from becoming a lawyer. Through chance, he met my parents and decided to take on their case. He never charged my parents for any legal fees, which would have been exorbitant by the time the case finally came to an end. Since he became deaf as an adult, he preferred to talk instead of signing, since his first language was English. The Supreme Court arranged for him to have a transcriptionist have his words transferred to a computer so he could read everything that was going on in real time. This was the first time such a venture had been undertaken. It is now the norm in courts all over America.

During the summer between fourth grade and fifth grade, the US Supreme Court announced that the two previous decisions of the lower courting my parents favor were overturned. They sided with Hendrick Hudson School District in the case of Rowley because they found that the school did provide me with adequate services to make sure I was passing. FAPE did not mean I was allowed to be the gifted child that I was. It just meant if I was passing which I was, then I was doing fine.

My parents already made a decision to move to New Jersey. There was no reason to stay in Peekskill, NY because I would never have an interpreter. My father commuted between New York and New Jersey everyday for many years, so it seemed logical to live closer to where my father worked. Nearby there was a day school for the deaf where many deaf children were mainstreamed. But before we could move, I would have to stick it out one more year at Furnace Woods. I had a teacher with an Australian accent. Mr. Brett and I had a love/hate relationship. My desk was right next to his so I could talk to him anytime I wanted to. But there were times when he was so frustrated with me because I could not understand him. He had big teeth that didn't make lipreading easy. Plus with that accent of his, I couldn't figure out what he was saying half of the time! One time, I kept asking him again and again what he was saying and he kept repeating and repeating and I was begging to him to please write down what he was saying and I was near tears. To make matters worse, his frustration level was ready to explode and it did. He yanked my ponytail and my head snapped back and I was in shock. I could not believe what happened. No other teacher ever touched me. I hated him for that and I tried to avoid him as much as I could from then on. One time we were on a field trip and he knew I was not following along, so he picked up a

piece of bark from a white birch tree and wrote down what the presenter was talking about. He wrote down the two words deciduous and coniferous and explained what they meant. I held on to the bark and when I came home from the field trip my mother saw it and thought that this act alone really showed that I needed an interpreter and the teacher knew it.

After all the misery he put me through, I'm glad he finally realized what it takes to communicate with me. I'm still mad about the map thing too.

One day in class Mr. Brett made an announcement about a map. He wrote on the board "M-A-P." I asked him for more information, and he said, "World map." I was scared. I would have to make a world map at home over the weekend. I arrived home and told my parents I had to make a map for homework. This was not unusual since I had done maps before, but never the whole world! Plus he didn't hand out map paper, so my dad and I drove to the next town to buy poster paper. We found a nice picture of the world and dad helped me outline the continents, then I worked on the map all weekend. I worked on it Friday, Saturday and Sunday. I was very proud of it when I finished because I put a lot of detail into it. I didn't know how much detail Mr. Brett wanted from me since he didn't give me a list. Monday morning, my dad helped me roll up the map and put a rubber band around it and I took it to school. I held on to my map and wondered when we would hand it in. Mr. Brett looked at me and handed me a big sheet of paper with a world map already printed on it. All of the students got one. I was dismayed that I really didn't understand that the map wasn't for homework. It was what we were going to be working on after the weekend. Mr. Brett asked me what the poster was and I told him it was nothing. My father asked me why I brought the poster home and I told him exactly what happened, but there was nothing he could do except hug me. Hugs have gotten us through many tough times.

My parents put up their house for sale, but the school district found out that we were moving and they put a lien on their house. We moved anyway, but my parents were not able to sell their house and the lien did not make matters easier. One thing after another, the conflict between the school district and my parents became a dogfight. Living in New York was just bad for my family and it was worsening.

The move to New Jersey was truly the best thing that happened, I started attending school with other deaf kids and it was the first time I truly didn't feel alone. I had an interpreter in all my classes. My brother had many friends; they didn't care that his parents and sister were deaf. They saw deaf students everyday so it wasn't too foreign of a concept for them.

I remember more than I would like to remember about my experience at Furnace Woods. I believe that I am supposed to remember stories like these so I can share my story in hopes that other children do not have to experience the same things I did. A lot of my experience regulates the kind of decisions I make today as an adult. If a conflict arises, and I know that I will have to put someone in an uncomfortable situation, I am more likely to avoid it. Such an example happened when I was looking for a doctor. I called a doctor's office and asked if they were willing to provide an interpreter for an appointment. Legally, they are required to accommodate me. The preferred accommodation is an interpreter, but that can also be the most expensive accommodation too. When the doctor told me no, I did not follow through with the appointment, I found another doctor instead. It makes no sense to me to work with someone who doesn't want to provide necessary accommodations to communicate with me. I'd rather work with someone who wants to communicate with me and values me as a patient. However, I know it is not always that easy. In the case of the school district, it is not easy to move and find a new school district and I wish that both sides never went into litigation to begin with.

Children should be allowed to be children. Too often children are robbed of their right to grow up without the weight of the world on their shoulders. I know the weight of my world was squashing me down during elementary school.

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TECHNOLOGY USE

Putting the Pieces of Electronic and IT Accessibility Together: Building Partnerships to Meet the Challenge of 508

Kaye Ellis

Abstract

How do you make IT (information technology) accessible to students who are deaf and hard of hearing? You can't do it alone. Historically, disability support offices provided accommodations for students to access information. With the increased use of electronic information through the web, video, on-line courses, and audio podcasting the task of providing access is overwhelming. After a brief story of attempts to bring electronic and IT accessibility to the attention of one community college, this workshop provided a forum for participants to share their successes and barriers. Participants were encouraged to identify partners on their campuses to address the accessibility issues surrounding the growing electronic and IT environment.



Introduction

Electronic and IT accessibility solutions go beyond the responsibility of the disability support offices. Are the right people to address the issues even aware there are access barriers to overcome? Are they aware there are laws that impact purchasing and development? Electronic accessibility affects faculty, web designers, curriculum development, purchasing decisions, and many other areas of an institution. The presentation included an opportunity for participants to identify potential institutional partners to meet the challenges of electronic and IT accessibility, and identify strategies to influence institutional policies.

Background Information

I became the coordinator for the Resource Center for the Deaf and Hard of Hearing at Tulsa Community College in Tulsa, Oklahoma in 2003. Within a few weeks of being in the postsecondary setting, the issue of accessible electronic and information technology was on my desk. A CD accompanying a biology book was the problem. The next week I attended the Southeast Regional Institute on Deafness conference in Mobile, Alabama and thought I would find my answer there. I discovered inaccessible media was a growing problem and no one had the answer. Advances in technology provide many advantages but they can also present new barriers to accessing information. A few months later at the League Institute, a national conference for community colleges, I heard the numbers 5-0-8 for the first time. Section 508 of the Rehabilitation Act requires federal agencies to have accessible electronic and information technology. Some states' interpretations of Section 508 included colleges and universities, and they embraced theses

principles and implemented policies to support accessible media and web sites. Oklahoma interpreted Section 508 as applicable to federal agencies and not state agencies or postsecondary institutions. Legislative help was coming. Oklahoma ABLE Tech, the state assistive technology program, was actively pursuing state legislation to assure state compliance with Section 508. The Oklahoma Electronic and IT Accessibility Law was signed into law in April 2004. The Oklahoma law is a development and procurement law similar to Section 508, and it specifically mentions inclusion of postsecondary institutions. The two agencies named to implement the law and assure compliance were the Department of Central Services and the Office of State Finance. The law also established an advisory council, which worked to develop technical standards effective September 8, 2005.

Building Partnerships

Staff from Oklahoma ABLE Tech and a member of the State Regents for Higher Education shared the news of the Electronic and IT Accessibility law with attendees of the Oklahoma Association on Higher Education and Disabilities (OK-AHEAD) conference. Members of OK-AHEAD applauded the news. I was pleased the law placed the responsibility on development and purchasing and designed as a retrofit for individual students by disability support offices. I soon discovered this news was not reaching others in the postsecondary setting. At our community college, the disability support staff seemed to be the only people who knew about the law. At the next meeting of OK-AHEAD, I learned other colleges and universities were experiencing the same feeling of being the only people on campus aware of the law. Statewide attempts to bring awareness were not proving to be effective in the postsecondary setting. Early training focused on purchasing procedures and web design for state agencies. Our challenge was to reach the distance learning program, library, media, faculty, and other stakeholders at the college to build partnerships to address accessibility and compliance of the new state law.

It was naïve to think that the first department I approached would embrace its responsibility and take over the efforts to bring the college into compliance with the laws. After several dead ends, I received some advice from a vendor at another conference who discovered that the library/media staff seemed to understand. I contacted our dean for library/media services. I met with him, provided a copy of the Oklahoma law, and waited to see what would happen next. Two weeks later, he contacted me. He recognized the college needed to move toward compliance. I consider this my first successful partnership. He was instrumental in establishing a committee to explore what impact the law may have on the college. The focus of the committee was later absorbed into a newly formed IT council. I accepted the invitation to join the council to bring awareness of the electronic and IT accessibility issue to the members. One of the members contacted me for additional information. He was in charge of our television programming and streaming video for distance learning. He recognized his department had a major role in college compliance and took responsibility for finding solutions. This was my second successful partnership. He understood it was no longer the sole responsibility of the disability support offices to provide accessible media. He took ownership of the situation and started building his own partnerships with vendors to address captioning for on-line courses and television broadcasts.

Any opportunity to bring awareness of the need to eliminate the barriers to access is worthwhile. My earlier unsuccessful attempts to find collaborators may have set the stage for future partnerships. Some puzzle pieces may not fit on the first attempt. You may need to try again to get the right match for successful partnerships.

Participant Concerns and Successes

The concerns shared at the conference centered around on-line and hybrid classes, faculty involvement, and captioning. Some successes shared include new state accessibility laws,

partnerships with instructional designers, free training resources, college funding for development and training, and college policies in place ensuring all media and textbooks are ADA compliant.

Strategies

- Identify the issue as a college wide responsibility and not limited to any one department.
- Identify potential partners including media, IT, faculty advisory boards, and vendors.
- Prioritize; the whole picture can be overwhelming.
- Take advantage of opportunities to bring awareness of the barriers.
- Form advisory groups that include different departments and/or agencies.
- Have a copy of the laws and technical standards available.
- Include students in the process as well as other end users.
- Build relationships with faculty.
- Create a task force.
- Work with faculty to incorporate accessibility into computer course curriculum.
- Offer to team with other departments to help them create accessible materials.

Laws

Section 508 of the Rehabilitation Act), as amended by the Workforce Investment Act of 1998

August 7, 1998

Oklahoma State Law 2197, Electronic and Information Technology Accessibility Law, April 2004.

Resources

Section 508: The road to accessibility. <http://www.section508.gov/>

Oklahoma IT accessibility legislation and resources. <http://www.ok.gov/accessibility/>

Oklahoma ABLE Tech-IT access. http://www.ok.gov/abletech/IT_Access/index.html

More Bang for Your Buck

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Abstract

In today's technologically fast-paced world of Deaf and Hard of Hearing services, we are constantly being asked to provide more with less. This presentation will focus on advances in technology that can help us provide quality training to our staff and resources to our consumers while saving money. Not all technology is economical or efficient. We will talk about the pros and cons of various systems and techniques that are being used in communication and service delivery.



Technology has become an essential part of doing business and daily living. Because advances in technology occur so quickly it is difficult to keep up with what resources are available. This paper will discuss four main areas in technology: communication, organization/administration, distance learning, and accommodations. The goal is to provide information that will help service providers and coordinators utilize the technology that will best help them serve their clients and increase their own productivity.

Communication Tools

Technology has made great advances in enhancing communication. There are many online services which allow users to make computer-to-computer calls free of charge. All that is needed is to download a simple program and to purchase a computer headset with microphone. Once the program is installed the user can then begin making calls to others who have the same program. Some of the programs which provide this service are: Skype, ooVoo, Gizmo, Ventrilo, PC-Telephone.com, Yahoo Voice, Mediaring Talk, and Google Talk. Computer-to-computer chats do not require a high speed Internet connection. Most of these programs will function well over a dial-up connection. However, they will not work over a satellite Internet connection due to the delayed ping rate. If calls are being made from a government office or university, then it is best to check with the IT department to be sure that the institution's firewall will allow the connection.

Most of the computer-to-computer voice chat programs include additional features such as video calls and computer-to-landline calls. These companies charge a fee to make calls from a computer to a landline or cell phone. The fee is usually much less than calls through a traditional phone company. Video calls can add a visual component to a chat. The user will need a webcam along with the headset. In addition the computer must have a high speed Internet connection since the video requires more bandwidth to transmit. The video quality can vary greatly depending on the amount of bandwidth available. However, the video is normally not high enough quality to conduct a conversation in sign language alone. Whether using a computer to chat, video chat, or call a

landline the technology can help reduce the cost of communicating with colleagues nationally or internationally.

Instant messaging (IM) is another mode of communication which has really taken off. In fact some people prefer to instant message instead of using email. The benefit of instant messaging is that it allows for immediate written communication if both parties are online. Many cell phones such as Blackberry and Sidekicks have become popular in the deaf community because they allow instant messaging as well as email. Some of the most popular IM programs are: AOL IM, MSN, ICQ, Yahoo, Google Talk, Bonjour, and Windows Live Messenger.

Two IM programs which offer some additional beneficial features are Trillian and Meebo. Trillian is a free downloadable program that allows the user to log into multiple IM programs simultaneously. This means one window is open to access multiple accounts instead of having various windows cluttering up the desktop. Meebo also offers the same service from a web application so there is nothing to download. This program can be helpful for anyone traveling since their IM accounts can be accessed from any computer.

Instant messaging is an inexpensive way to increase communication access. Students with a hearing loss can communicate with their instructors and support services office as easily as their hearing peers. It is also an effective way for colleagues to work collaboratively without incurring large phone bills.

Organization/Administration Tools

Organization is another important aspect of an efficient work environment. If used properly, technology can provide many tools to help increase organization. Learning any new technology or system takes time but once it is learned, it can become a time saver. One tool that can become a time-saver is having an online calendar. Online calendars can be accessed from any computer, which is helpful when traveling. They also can be set up to share calendars between multiple users. This means that each person in an office can upload his/her calendar and then the entire office has access to know when everyone will be in the office. This can save time when trying to schedule meetings or appointments. When working with students on organization, a case manager can ask the student to maintain an online calendar and thus help the student stay on schedule with tasks. Some popular online calendars are run by Google, Yahoo, and MSN.

In addition to sharing online calendars, colleagues may want to share files online when they are collaborating on projects. In the new age of technology, many professionals collaborate with others across the nation and may never actually meet face-to-face to work on projects. Online file sharing allows individuals to upload files to an Internet server and then access them from any computer. Many services offer a free amount of file storage and after that limit is reached, they begin to charge a fee. These services allow the user to password-protect the files and to decide who will have access to them. The following is a list of just a few companies which provide this service: xDrive, Flipdrive, 4shared.com, MediaMax, MyDataBus.

Online file storage can also benefit the professional on the go. Important files can be saved online so that they can be accessed when away from the office. This can ensure that there are backup copies as well.

Online file transfer is another beneficial service when working with very large files. It is no longer safe to assume that a file can be sent via email. Many email programs limit the size of a file that can be sent. Online file transfer companies allow the user to upload a file and then email the recipient(s) a URL where the file can be downloaded. This avoids having the file sent through

email. Some companies which provide this service are: sendspace.com, transferbigfiles.com, yousendit.com, [accellion](http://accellion.com), sendthisfile.com, and weboffice.com.

Another useful service is remote desktop. This simply means that the user can access a computer remotely. It can be used by IT professionals to troubleshoot problems for a user, or by a person who is traveling to access his/her computer back in the office. This is becoming more and more popular as people are away from their offices more. Many services charge a fee such as "Go To My PC" but others such as "LogMeIn" have fee-based and free versions. In addition Windows XP has this feature built in.

(<http://www.microsoft.com/windowsxp/using/mobility/getstarted/remotefirst.msp>)

Online collaboration is similar to the remote desktop feature. These programs allow multiple users to log on and view a single computer. In this way, remote training can occur. The trainer would be the "host" computer and all other users would view what is on his/her computer screen. In this way the trainer can show a PowerPoint or take users to various websites. Some of the programs have a built-in voice component while others use phone lines or other programs such as Skype to send the audio information. Some of the popular programs for online collaboration are: yugma, zoho, showmyPC, and webex.

Jott is an online service which uses voice recognition software to allow the user to send text messages via a voice message. The user will set up an account with Jott and create an address book. Then the user can use a voice phone to call the Jott number. The user will specify to whom the message will go and then speak a short message such as "meeting tomorrow at 9." Jott converts the message to text and can deliver it as a text message, and IM, or an email. This is a quick way to send reminders to oneself or others without actually typing it in.

Distance Learning Tools

Technology is also being used to increase opportunities for learning. Some of the programs previously discussed make individual and small group collaboration and learning possible. However, schools and universities are increasingly turning to forms of distance learning to meet the demands of the ever-increasing "non-traditional" student.

"The definition of distance education would be an educational situation in which the instructor and students are separated by time, location, or both. Education or training courses are delivered to remote locations via synchronous or asynchronous including written correspondence, text, graphics, audio, and videotape, CD-ROM, online learning, audio and video conferencing, interactive TV and fax. Distance education does not preclude the use of traditional classroom. The definition of distance education is broader than and entails the definition of eLearning. Distance education and distance learning are often used interchangeably." (ASTD, 2008)

Unfortunately, most distance learning is not accessible to deaf and hard of hearing individuals. Great strides have been made in technology and the arena of distance learning, but accessibility still seems to be lagging behind. Institutions are left trying to play catch-up and be creative in their provision of access and accommodations. While vendors adhere to ADA and 508 guidelines, there is not a standard approach for the inclusion of sign language interpreters and/or captioning. Another issue that arises with providing accommodations depends upon whether the course is being delivered through either synchronous or asynchronous means. Institutions utilizing content management systems such as BlackBoard, Wimba, or Elluminate Live should explore options for providing accommodations within the platform the institution is using. Can video be incorporated into the system so that an interpreter can be provided as an accommodation? What about

incorporating captions? Bloomsburg University has been providing distance education courses through Wimba and has provided a video for an interpreter and captions through the text chat area (<http://campustechnology.com/articles/56259/>). There are institutions that utilize Elluminate Live and are incorporating captions through the use of speech-to-text software. Content management systems are also beneficial to Disability Services in that service providers are also given access to course content which enables them to prepare for the course before each session.

Multimedia is defined by www.webopedia.com as the use of computers to present texts, graphics, video, animation and sound in an integrated way. Within the realm of multimedia are: webcasting, podcasting, and video/webconferencing. Definitions for these three formats can be found on www.webopedia.com as well. The main challenge with multimedia is ensuring that it is accessible.

Typically with webcasting, a pre-registration process is not established for individuals to request specific accommodations. Therefore, it is necessary to provide both an interpreter and captioning so that it is fully accessible. With video/webconferencing, it is also necessary to provide an interpreter in meetings, trainings, etc., where there is a mixed audience of deaf, hard of hearing, and hearing individuals. Video/webconferencing is becoming more popular with the effect of the economy and reduced travel funds for states and institutions. Both webcasting and video/webconferencing can prove to be very effective methods of delivery of multimedia when accommodations are thought through before the event occurs. An important step is working with the IT Department on campus and explaining the needs before the event occurs.

Webcasting and streaming video can be achieved through a number of software programs available such as QuickTime, RealMedia, windows Media encoder, Flash, Accordent Video Streaming, and MediaSite. Regarding accessibility, not all software programs at this point incorporate captioning as an accessibility feature. Currently, only Flash and QuickTime have this feature incorporated/built-into their software. RealMedia, Windows Media Encoder, Accordent Video Streaming, and MediaSite have not incorporated this feature. When an institution is utilizing a software program that does not have captioning built in, creativity may be required on the part of the Office of Disability Services and/or the institution providing the live webcast or streaming video.

Captioning online streaming and digital media is a two-part process: a) creation of the transcript and b) creation of the time-code file to synchronize the captions with the media file. MAGpie is one option for creating time-code files that quite a number of institutions are encouraging faculty/staff to utilize because it is a free download from NCAM. Hi-Caption is another option for creating those time-code files and the cost is between \$400 to \$500. The Hi-Caption product has more features than the MAGpie product. Regardless of the product utilized, it's important to remember that creating time-code files for captioning is not a quick or easy process. It takes time and users should adhere to guidelines from the Described and Captioned Media Program (DCMP).

There are a number of online video/webconferencing services now available. Some of those include ooVoo and e/pop. For a video/webconference to be effective, users will experience a higher level of satisfaction if they are on a high speed internet connection that is equal to or greater than broadband. There is not a perfect solution for video over IP (or the internet) and a video/webconference will only be as good as the amount of bandwidth as well as their connection speeds (upload and download).

Accommodations

Technology has helped to enhance access to services needed by individuals who are deaf and hard of hearing. In this section we will highlight some of the technologies available, as well as providers who offer the service.

Most institutions experience problems in finding sign language interpreters. The need for qualified interpreters is overwhelming, particularly in the rural areas. One possible solution to meet the communication needs of students is video remote interpreting (VRI). Video remote interpreting can be more cost-effective than hiring an interpreter, particularly in situations such as in a rural area where the interpreter is paid for mileage and drive time, when less than 24-hours notice is given, or for short meetings and classes. VRI is a service who is paid per minute; during a 50-minute class, the interpreter would only be paid for 50 minutes, and not a two-hour minimum. This option is perfect for a short meeting with the instructor or academic advising.

The technology needed to set up VRI services varies from company to company, but generally all require a high-speed Internet connection. There are several agencies which offer video remote interpreting; a few are listed below:

- Birnbaum Interpreting Services (BIS)
- SignOn VRI
- AccessAmerica VRI
- Sorenson VRI
- MEJ Personal Business Solutions, Inc.

Many universities face the issue of what to do when an interpreter calls in sick. The disability service office scrambles to find a replacement but often the student must go without services for that day. If the university already had services set up with one of these companies, it could easily still provide access using VRI.

Suppose there is a student in a graduate program who is taking some upper-level courses such as statistics. Interpreters who are not familiar with statistics would most likely have a difficult time interpreting this class. It may not be possible to find a local interpreter who has a background in the particular subject area. Statistics classes can be very difficult; it's not unusual for any student in the class to have a hard time understanding the concepts. Imagine trying to get it through an interpreter who is transliterating the information because she/he does not understand the concept trying to be conveyed. Many VRI companies will match an interpreter who has a background in the subject matter, as well as with the communication modality of the person. Educational packages are sometimes available that will give a fee based on an entire semester and the number of hours their service is used. This is something that would be would need to be discussed up front.

Does VRI answer every single limitation or barrier to providing services? No, but it can be an effective tool to use for accommodation purposes. Although VRI has been successful in many situations, it is not for every situation. There are some situations that require an on-site interpreter, so making a decision to provide VRI goes back to the individualized accommodations needs of student. For interactive and hands-on classes, an in-person interpreter would be preferable. Perhaps video remote interpreting could be used for two or three classes, and then a live interpreter for the one class that requires a lot more face-to-face interaction. For more information about VRI, visit <http://pepnet.org/training/train070522/>.

Another technology that could be used to provide accommodations is remote captioning (RC). The captionist is located at a remote location and then transmits to the captions to a screen where the program is taking place. In this scenario, the captioner listens to the presenter through a telephone

or microphone that is set-up in the room and captions the spoken language that is sent through the Internet using special software. There are several methods of delivery will contracting for RC services. Communications Access Realtime Translation (CART) is a service that uses a stenotype machine to translate spoken language into a word-for-word transcription. More information about CART can be found at <http://www.cartinfo.org/>. In addition to CART, there are remote C-Print and Typewell Services available. Both C-Print and Typewell provide a translation that is meaning-for-meaning.

The technology needed to set-up RC services varies from company to company, but generally all require a high-speed Internet connection. There are several agencies that offer remote captioning; a few are listed below:

- QuickCaption
- Communiqú Interactive Solutions
- Alternative Communication Solutions
- 20/20 Captioning & Reporting
- Caption First

Remote captioning can be a cost-effective alternative to providing communication accommodations. It is clear from population statistics that there are a lot more hard-of-hearing students than signing deaf students. These students could greatly benefit from having captioning services. Also, as universities begin to implement universal design, they will start to see the benefit of captioning for all students, whether or not they have a disability.

PEPNet hosted a teletraining on remote captioning in November of 2007. There is a lot of good information that may answer questions about remote captioning. The archived version of that training can be found on the PEPNet website at <http://pepnet.org/training/train071025/>.

Telecommunications technology is rapidly changing. Most people do not use TTYs any longer. Today one rarely thinks of the TTY when discussing relay services. Most popular today is Video Relay Services, Relay Conference Captioning, and Internet Relay.

Video Relay Service (VRS) is a telecommunication service that allows a deaf person to communicate with hearing individuals through the telephone. The FCC regulates VRS so there are federal guidelines that VRS companies must follow to maintain compliance with federal law. This service is provided through the use of a videophone and high speed Internet. Sorenson provides free videophones for deaf individuals, but other videophones such as D-Link i2eye videophone, the OJO videophone and coming soon is VideoSign 3.0 and VPad. Listed below are VRS providers that can be used to provide telecommunication access for your deaf consumers.

VRS Provider	Website	IP Address/Phone number for VP or others
AT&T, Inc.	http://www.attvrs.com/	attvrs.tv
Communication Access for the Deaf and Hard of Hearing, Inc.	http://www.cacvrs.org/	cacvrs.tv
CSDVRS, LLC	http://www.csdvrs.com/	csdvrs.tv
Hamilton Telecommunications, Inc.	http://www.hamiltonrelay.com/	hamiltonvrs.tv

Hands On Video Relay Service, Inc.	http://www.hovrs.com/	hovrs.tv
Hawk Relay, LLC	http://www.hawkrelay.com/	hawkrelay.tv
GoAmerica Communications, Corp. (i711.com)	http://www.i711.com/	i711vrs.tv
LifeLinks, LLC	http://www.lifelinksvrs.com	69.18.207.166
NXi Communications, Inc.	http://www.nxicom.com/	Go to http://www.nextalk.net to download video software
Snap Telecommunications, Inc.	http://www.snapvrs.com/	call.snapvrs.com
Sorenson Communications, Inc.	http://www.sorensoncommunications.com/	18663278877 (i2eye) or SVRS.tv (vp100 or vp200)
Sprint Nextel, Corp.	http://www.sprintvrs.com/	sprintvrs.tv
Viable, Inc.	http://www.viable.net/	viablevrs.tv

Relay Conference Captioning (RCC) provides real-time captioning and voice relay calls for conference calls and is a service offered by Sprint. In many states it's free! If training is being provided through a teleconference then individuals can access online captioning provided by RCC. All that is needed is a computer that has Internet access and an access code to log into the captioned site. RCC must be set-up with at least 48 hours in advance. PEPNet used it for several teleconferences it sponsored, and individuals were able to have access to the training through captions.

There are limitations to RCC, so using remote captioning may be a better option in some situations. For more information go to:
http://www.nextel.com/en/solutions/relay_services/relay_conference_captioning.shtml.

Internet relay is basically telecommunications access over the Internet. By having one of these Instant Messenger services on a computer, deaf consumers could use IP-relay to call hearing individuals. There are several ways to access IP relay, through instant messenger, from a downloadable videophone based software, and by using web CapTel. Listed below are several relay companies that use instant messenger to provide relay services.

- Sprint: "SprintIP" (AOL)
- HOVRS: "hovrsIM" (iChat & AOL)
- Hamilton: "ThatsHamilton" (AOL & Google)
- Sorenson: "siprelay" (AOL)
- Verizon: "myiprelay" (AOL or MSN)
- i711: "i711relay" (AOL)
- National Relay: "nrsiprelay" (MSN & AOL)

Another way to use IP Relay is by downloading videophone software to a computer. A webcam and high speed Internet connection are needed. The quality of the video will depend on the upload and download speed of the Internet connection. There are several companies that provide this service for PC users. MAC users are out of luck. Currently, there are not any software programs that are compatible with MAC. MAC users have the option of using XMeeting with Viable and HOVRS. Listed below are several companies that provide this service.

- Sprint: <http://www.sprintvrs.com/download.htm>
- HOVRS: <https://secure.hovrs.com/videosign/videosign.aspx>
- Sorenson: http://www.sorensonvrs.com/options/envision_info.php
- Viable: <http://www.viable.net/product/vv>
- i711: <http://www.i711.com/vrs/comparison.php>

Several companies also offer VRS through a web browser interface; a few of them are listed below. This is a viable option where firewalls may prevent the downloading of VRS software to a computer.

- Sprint: <https://www.sprintip.com/index.jsp>
- HOVRS: https://www.hovrs.com/VRS_SSL/hovrs.aspx
- Hamilton: <http://www.hamiltonrelay.com/inspirechat/index.htm>
- Verizon: <http://www.ip-vrs.com/index.jsp>

Web CapTel is a service that allows a person to have a voice to voice telephone over the internet that is captioned. This is the perfect option for individuals who prefer to speak for themselves but need captions to make sure communication is clear and understandable. To access this free service, log onto the websites listed below.

- Sprint: <https://www.sprintcaptel.com/index.asp>
- Hamilton: <https://web.hamiltoncaptel.com/>

Technology can greatly enhance productivity and services when used correctly. However, remember that all technologies require time to learn. It is important to allow oneself the time necessary to become familiar with technology so that it can become a time saver not a time trap.

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Meaning-for-Meaning in Speech-to-Text Services: A Better Understanding

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Abstract

Speech-to-text support services are growing rapidly in popularity and use. While it is easy for most people to envision what a verbatim class transcript includes, many people do not know or understand what a meaning-for-meaning transcript includes. A common misconception about meaning-for-meaning transcription is that it's a summary or "dumbing down" of the message. In reality, a meaning-for-meaning transcript contains a concise and thorough message, richly detailed, and in full English grammar. This presentation will describe the process and product of meaning-for-meaning speech-to-text services, as well as examine methods to quantitatively analyze the completeness, accuracy, and readability of a resulting transcript.



Speech-to-text services are common accommodations for individuals with a hearing loss. The service provider converts the spoken word into a written text document. These service providers can be divided into two general categories: verbatim and meaning-for-meaning. This paper will focus on providing a better understanding of meaning-for-meaning services. It will consider the human factor or the service provider not the specific system or technology. The technologies for the various systems are all very similar but it is the human factor that will decide the quality of the final document. Performance is the critical part of the equation.

It is important to begin with a definition of meaning-for-meaning. When asking a group of people to define meaning-for-meaning the answers would vary greatly. Words like "summarization" and "paraphrase" come to mind but neither gives a full picture of what meaning-for-meaning in speech-to-text services actually means. A general definition might be, "a concise and thorough translation, or paraphrase, of spoken English content." However, the best way to explain meaning-for-meaning is to consider the difference between spoken English and written English.

Spoken English and written English are in effect different languages. When people speak, even in a lecture format, they do not always use Standard English. They often change subjects in midsentence or speak in sentence fragments. If these spoken errors are written in as a verbatim transcript it can be confusing.

There are many benefits for the client in using meaning-for-meaning services. First the transcript is a model of written English. Even though the speaker may not use perfect grammar, the service provider will take that spoken passage and adapt it to an understandable written format.

The transcript is a succinct delivery of the spoken information. For example, information that is said multiple times would be emphasized through the use of formatting such as bold text instead of repeating the phrase multiple times. Extraneous words and vocal interferences such as “uh” and “you see” would be removed.

The transcript is a manageable length. For an hour-long class the transcript would average 8 to 10 pages, depending on the service provider. If the transcript were 20 pages for each hour of class the student might be overwhelmed with the amount of text.

Meaning-for-meaning text includes the pragmatics of spoken information. This means that not only the words are typed but also the meaning behind the words which are indicated by inflection and tone of voice. Environmental information also is included so that the client is aware of why and how comments pertain. For example if a cell phone rings in class, the student would need to know this in order to understand why the instructor is suddenly angry. The service provider would also include the tone of the message for example by putting the word sarcasm in parentheses to show that the speaker is not being serious.

And finally, the meaning-for-meaning transcript is visually accessible. The service providers use bold, italics, numbered lists, bulleted lists, and such to organize the information in a format that is visually organized. Service providers also learn to use white space efficiently to help alleviate eye strain for the client.

Students who are deaf and hard-of-hearing rely this service to understand the content of a class. This is not always easy when the linguistic meaning of the passage does not reflect the speaker’s meaning. An example would be in a question versus a statement such as: *Can you see (glimpse) Mary?* compared with: *Can you see (imagine) Mary?* Each of these sentences contains the exact same words but have very different meanings. Another example is with sincerity versus sarcasm: *The door is over there (direction).* compared with: *The door is over there (order to leave).* It is easy to see how misunderstanding can occur when the linguistic information found in the tone of voice and inflection is missing from a written translation of the spoken word.

After discussing what meaning-for-meaning is and how it can benefit the client, it is then important to look at the mental processes required by the service providers. By sitting in on any college class, it is easy to see that spoken English and written English can be like two different languages. When the instructor speaks extemporaneously, the word choice and flow of speech is very different from when the instructor reads a passage from a book. Once this difference is understood, then the need for meaning-for-meaning services becomes clear. Because the service providers are not simply typing everything that is heard they must use a complicated mental process to produce a clear and grammatically correct translation.

The following is a verbatim transcript of a presentation on the topic of deaf and hard-of-hearing students transitioning from high school to college:

In presenting a workshop out at Houston last year for their teachers for the deaf we looked at a number of different issues in bringing up three or four specific paradigms that you need to look at. Students who are deaf sometimes if they use sign language may not have parents that know how to communicate effectively. So

what do you do? Sometimes the teachers become the ones sometimes it is the voc rehab where you need to go. If you look back at the nuts and bolts that Jenny helped with there are some very basic facts. That students even know what their hearing loss is. What do they need for accommodations? If you send them off to college like here at Jacksonville do they know what their insurance is? Do they know health life car whatever? So looking at that.

A deaf individual reading this would probably gain very little understanding of the topic; whereas, a hearing individual would understand more from hearing this passage spoken than from seeing it in written form. The human brain processes information differently when it is received auditorially or visually. This is why it is important to translate the spoken word into a clear and understandable written format.

Traditionally it was thought that a verbatim transcript was the best service and that meaning-for-meaning was a substandard alternative. However, after seeing the example above it is easy to see that verbatim may not always provide an optimum transcript. It is important to remember that not “one size fits all” in service provision. In fact, one service may not fit even the same student in all situations. For years, the myth that “ASL was bad English” was perpetuated; however, ASL is now accepted as a distinct and separate language from English. In the same way, meaning-for-meaning is not bad verbatim. It is a distinct and different service, which may be preferable in some situations.

The mental processes a meaning-for-meaning service provider uses are very similar to that of an ASL interpreter. For this reason, looking at various interpreting models can help explain how a meaning-for-meaning transcript is produced and how service providers can improve their skills.

Verbatim service providers operate at the lexical level. They may need to process homophones such as “their,” “there,” and “they’re.” Otherwise there is little processing required since the words are spoken and then translated to text via a stenography machine.

Meaning-for-meaning service providers work at the phrasal and sentential level. The service provider must hear a complete thought or concept before mentally translating it into a written format. If the service provider processes at the word level, then the meaning may be lost.

Looking at some interpreting models can be useful at this point. The Colonomos Model of interpreting looks at taking the original or source language and changing it into the new or target language. In speech-to-text, the two languages are both English but the concept is the same since spoken and written language have distinct differences. The service provider must first listen to the spoken word, and then understand the meaning before creating the written transcript. If the service provider does not understand the message, she will not be able to adequately represent the message at the contextual level (Colonomos, 1989).

A second model of interpreting which is useful is the Gish Model. In this model the service provider is asked to look at the different levels of a message. The speaker’s goal is the overall purpose to consider. Below that is the theme of the message. On the third level are the objectives to convey the theme. The fourth level is the units of information used to communicate the objectives and finally the individual data and details. Often a service provider becomes stuck on the lower level of individual details. When this happens, the overall message can be lost because a series of individual details may not flow into a cohesive message. If a service provider cannot keep up with a speaker, then it is important to move up a level in order to include as much detail as possible while maintaining the overall message (Gish, 1995).

One example that demonstrates this is when a captionist went into a classroom only to learn that a video would be shown. The captionist knew she could not caption all the dialogue for the video. She asked the instructor what his goal was in showing the video. The instructor stated that he wanted the students to focus on the sound effects. This changed the approach the captionist took in captioning the video. The result was that the student was able to follow the subsequent discussion and participate fully. Had the captionist not had this overall goal to follow, she would have tried to summarize the plot and dialogue which would have left the student lost in the later discussion.

A final interpreting model to consider is the Cokely Model. This model provides a very detailed description of how interpreters process information. It can be helpful to show the Cokely chart to individuals who are not familiar with the complexity of meaning-for-meaning services in order to help increase understanding. The Cokely Model also explains various types of miscues that can occur: omissions, additions, substitutions, intrusions, and anomalies. Service providers can avoid these miscues by understand when and how they occur (Cokely, 1992).

Service providers can use these models to help them improve their skills and increase their understanding of the complex mental processes that meaning-for-meaning requires. In addition, service providers should have strong short-term memory, an expansive vocabulary, good comprehension of Standard English, knowledge of cultural and syntactical reference, a broad knowledge base, good summarization skills, and fast typing speed. Exercises to help service providers achieve these skills can be found in *Appendix A*.

A common question which administrators have is how can you analyze a meaning-for-meaning transcript. How can you really know if such transcripts are good, if they express clearly and accurately what the speaker said?

Many people say you can't analyze meaning-for-meaning transcripts because you can't match them word-for-word with what was said. But they can be analyzed, and there are many professions that use meaning-for-meaning translation of information. Those other professions do analyze meaning-for-meaning output regularly.

One of those professions is foreign language interpreting, such as someone translating from Spanish to English. There are idioms and other things to consider that make it so you cannot do a word-for-word translation between different languages. The goal is to take the meaning expressed in the first language, and express that same meaning in the second language, with different words and different grammar.

Work has been done by the National Center for Interpreter Testing, an organization within the University of Arizona, to develop standardized test procedures and to determine if specific meaning-for-meaning foreign language translations done by individuals are complete and accurate. The test, the Federal Court Interpreter Certification Exam, is used to measure the language output of foreign language interpreters, and to qualify them to work in the federal court system.

That meaning-for-meaning testing of foreign language interpreters has been found to be so valid that it is defensible in court. This is one example that shows that analysis of meaning-for-meaning output can be done, and done well. Change from one language to another can be measured.

Another profession that routinely measures the accuracy and completeness of meaning-for-meaning translation is Sign Language Interpreting. The Registry of Interpreters of the Deaf (RID) has developed standards and protocols to determine if the signed output message matches the

message that was spoken. Their certification tests are recognized as valid and reliable, showing again that meaning-for-meaning output can be analyzed and measured.

Another area in which meaning-for-meaning analysis is done in a valid and reliable way is discourse analysis. Researchers look at writers' output and instructors teaching classes to see if the information they are speaking is conveying the intended information accurately. That is a matching of the intended meaning with the actual meaning conveyed. Methods have been developed to reliably judge if the output matches the intended meaning, despite the fact that different words and grammar are used to convey the information from the original source.

Two other groups that have developed and used valid and reliable measurement protocols are the C-Print and Typewell organizations. Both have done quantitative analysis of meaning-for-meaning transcripts in their past certification evaluation programs. By comparing the information in the transcript with the verbatim audio of a lecture, the accuracy and completeness of the information conveyed can be reliably and validly measured.

All of the professions mentioned have in common that they routinely quantitatively analyze meaning-for-meaning output, such as transcripts and signing, to determine if it is "good," if it is faithful to the meaning originally spoken.

The way each of these professions measures the meaning-for-meaning output have several things in common. These include a similar type of source material, a specified unit of analysis, an objective scoring criteria, trained judges using objective criteria reliably, consensus scoring, and a final quantitative outcome measure which is valid and reliable.

In each of the professions' measurement of meaning-for-meaning output, the source material used is authentic and from a representative context. It includes the verbatim words AND context and pragmatics. Pragmatics means the speaker's tone, body language and attitude descriptors. Contextual, non-spoken information, such as interruptions, must also be noted.

By "specified unit of analysis" is meant that the testing protocol defines whether the judges look at the whole discourse level, at sentences, at phrases, at single words. The discourse level was an example mentioned with the Gish Model.

Each system has an objective scoring method. You need judges to do this quantitative analysis, to use the analysis protocol and scoring material and apply them reliably. It takes time to train judges to reach reliable scoring levels.

Each system uses consensus scoring. That was a new idea that came from the work at the University of Arizona, where they developed the method for analyzing the output of foreign language translators. Consensus scoring works like this: Two trained judges both look at a video tape of someone that is translating, or signing; or at a transcript. Each judge notes for each unit of analysis if the information is accurate and representative of what was spoken. For any items that the judges disagree on, they discuss that item and come to an agreement.

When two trained judges look at something they will usually agree on about 85% of it. That leaves about 15% that needs to be discussed, and a consensus reached about each item's acceptability as a meaning-for-meaning representation of what was spoken. The final outcome in each of the professions' measurement systems is a quantitative measure which is valid and reliable.

A lot of work goes into good quantitative analysis. Here are some examples of what must be done, and how long each step of the process takes. For an hour lecture, you are looking at 2-6 hours to prepare the source material. Then it takes over 20 hours of work to identify units of analysis and develop objective scoring criteria. There is a second person involved who is an expert in the same field, usually a professor. Lots of hours are needed, by a couple of people.

Training the judges to do the objective analysis, and then to do the actual analysis takes a long time, many hours. There are two people working and they have to discuss any points of disagreement. They have to refer back to the audio recording and go back and discuss items.

When you add up all the time, from preparing the source material through computing the final objective outcome measure, it can take 38-42 hours to get one hour of lecture analyzed. Some of this time gets spread over many people and the same prepared source material can be used to evaluate many different service providers. But still, the amount of time involved in the whole process can be really daunting.

It is too much time for a supervisor to do: either analyze the work of an already-employed service provider, or judge the work of a service provider one is considering hiring. Thus, the goal that we came up with for this presentation is a quick way to do a meaning-for-meaning analysis procedure.

First, let me give you a little background about kinds of testing. There are two different kinds of analysis: quantitative and qualitative.

Quantitative analysis is a numerical measurement and is expressed in mathematical terms. For example, how many sentences were accurately captured? How many words were spelled correctly? Qualitative analysis is based on generating a description of the qualities of the transcripts, and the "measurement" is expressed in natural language, such as: complete, accurate, easy to read. Are sentences clearly worded? Does the information flow smoothly?

And the transcript should be easy to read quickly. The students are reading in real-time. Things are moving quickly. Their eyes are getting tired. You want it to be easy to read so they can get that information quickly and easily.

Quantitative analysis is very time-consuming and hard to do well and do correctly. Qualitative analysis is easier.

A "quick" way to do a qualitative analysis is this: Get an unedited transcript. If you could sit in the class and listen to the lecture as it happens, that would be great. But for someone looking to hire a service provider, you can just use an unedited transcript from any class or meeting.

Then you need to just sit down and read the transcript deeply. We know the positive side of what we want. We want the information to be complete, factually accurate, and easy to read. Sit down and look for places these positive things are not there; look for problems in a transcript.

Look for any unclearly worded sections, gaps, or jumps in the information flow. You could be reading along and know there's something missing.

Look for fact errors. Some fact errors are just glaring, such as if they have reversed the logic order of something or put in a 'not' when the 'not' is not supposed to be there. You'd mark those sections as problems. Or you'd note sections that are hard to read. You have to get your glasses out. You'd mark those sections as problems.

So, I'll show you a couple of samples of possible problems. Read the examples and see if you can spot the problem.

Problem Sample #1

Advertising is everywhere. I flew to LA this weekend and I was basically on a 4 hour advertisement. The planes have ads painted on them. The flight attendants make announcements to buy the Delta credit card using the sandwiches.

A Fact Error is in the last sentence. Reading the transcript deeply, you'd catch that confused sentence as a fact error. These things happen when you are interpreting and transcribing, especially in a fast moving, dense class or meeting. Things can get mixed up. Often people transpose numbers in a phone number. So, if you are reading a transcript, you look for things like that and you circle them.

Problem Sample #2

The competition between cohesive forces and thermal energy determines if something is a solid, a liquid or a gas. If the thermal energy is a lot less than the cohesive forces, you have a There is only one class of liquid, but there are two classes of solids: crystalline and amorphous.

That segment has obvious gaps and missing information. These are easy to see. Lots of times, though, gaps aren't so obvious. But what happened? What caused those gaps and problems? There might have been noise next to the service provider or something happened and they lost the whole thought. It's just gone. It's not good, but it does happen.

Service providers can ask for repeats, but sometimes you just can't interrupt. However, in the two systems that I know best here, TypeWell and C-Print, the service providers are trained to ask for clarification.

Is this actually a poor transcript? The way I will answer that question is that this is an example of a non-ideal transcript. A service provider should have strategies to use when somebody coughs. I will approach this situation in this manner: we identified some problems, now what do we do with them? Should we kick out the cougher? The service provider might ask for a repeat of the missed comment; or she might move her chair away from the cougher.

Again, you are doing this "quick" qualitative analysis of a transcript. You mark things like this. Some are less obvious. Many of you probably have done observations of interpreters. You have probably seen it where they just lose it. They may look to their team and get filled in, but many times they just need to go on. So, there are very similar kinds of problems or events that cause this to happen in both kinds of services.

Problem Sample #3

Today we'll be working with sentences one more time. Let's look at the syllabus. Now we'll talk about periodic structure. Look at syllabus that words WIP come up again and again. Each day from now on, bring Works In Progress with you. Shift from works reading and interpretation and writes based on that to works generated by you.

The last sentence above is unclearly worded. What is that sentence suppose to mean??!! These kinds of wording errors do happen, and if you are doing an evaluation, as said before, some service

providers are really great and do wonderful jobs. And others, just like in every profession, are not so good.

So this happened to come from a service provider that had problems. What happens when a service provider loses the sense of what's going on? They might just do a "brain dump" and just put words out.

You will see a pattern like that as unclear wording. You don't want that, but if you see it you can help the service provider improve by looking at transcript and then working to improve problem areas.

Problem Sample #4

How many people here have TiVo or have DVR ? Not that many, you are college students on a budget, but a large percentage of people in the United States have this technology, and it will get worst for advertisers. They thought the same thing would happen when DVD came along, and VHS. That television would go away, but it does not, it just adapts and changes. The other thing, advertising is everywhere. I flew to Los Angeles this weekend, I was on a 4 hour commercial from the time I get to the airport. The planes now are painted with advertising, from teams to products. You get on the plane, the flight attendants make announcements, to buy the sandwiches that they do not give away anymore, with the delta credit card, sign up here. Another credit card. I put my tray table down and there is a Microsoft ad right there in my face.

That sample is hard to read quickly. There are no paragraphs for eye relief while reading, or for showing the topic organization. The service provider needs to work on better formatting.

Okay, so the main message for you from all this is that you can do a qualitative analysis of a meaning-for-meaning transcript by just reading it, and looking for unclear wording, gaps, fact errors, and reading ease.

But what if you are looking at a transcript for advanced architectural design class, for example, and you haven't sat in on the class yourself, and you don't know the subject area and you don't know what's a fact or not. Or maybe the information in the transcript seems to jump all over the place. Is it because of the service provider, or is it the class, or is it the instructor?

Here are some ways to solve those mysteries. Ask an "expert" in the topic and/or the class instructor. Instructors often are not available for this review of the notes, but we have had good luck with a top student in the class. You can ask the instructor to recommend someone in the class who really understands the class information and could help the Disability Support Supervisor evaluate the accuracy of the info in the transcript.

Notes from a class notetaker can also be used to see what information was given in the class, and what gaps there may have been. That's a way to see if the gaps are from the service provider or from the professor.

One strategy to see if gaps are due to the professor's style or the service provider's abilities is to get a transcript from that same service provider for a different course or different teacher.

Another way to solve that mystery is to look at the transcript for notations of silent activities. C-Print and TypeWell service providers are trained to note when there's silent activity going on, such

as the class working silently. If there are no notations of silent activity, it means either that the service provider did not note them (but should), or that the class was active, but the service provider missed information and had gaps in the flow.

Remember the “rule of thumb” that a meaning-for-meaning transcript is typically about 8-10 pages for an hour class. If a particular transcript is a lot less than that, or if a particular service provider often has much shorter transcripts from all her classes, you should probably be concerned.

It takes about an hour to do this kind of qualitative analysis, this deep reading and needed “mystery solving.” However, it is worth it because the process gives you so much information about individual service providers.

For each of the problems you note in a transcript, give the service provider some of the skill enhancement strategies given for the component skills of being a good service provider. Those will help you help a service provider overcome problems.

You may encounter situations where a service provider has a lot of fact errors, or the transcripts may be hard to read, or other problems noted in the analysis of the transcript. To address these issues, you can look at that analysis you just did, match up the problems with the desired skills, then match up those skills with the strategies suggested, and help the service provider get better.

Meaning-for-meaning is a service which provides students with full access to spoken communication. Understanding how the mental processes work for the service provider and how the transcripts can be analyzed, will help support service coordinators improve services for the students.

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Appendix A

Skill Building Exercises

Short-Term Memory Building

- Listen to a practice lecture. Do not begin typing until the third word is spoken. Then increase the lag time to the fifth word, then to the tenth word.
- Listen to a practice lecture tape. Allow it to play for 1 minute and then pause the audio. Type as much of what you hear as you can remember. Slowly increase the amount of time that you listen before pausing to type.

Vocabulary Building

- Subscribe to a *Word of the Day* email group. Each day you can learn a new word. Practice the words but making it a group activity with co-workers. See who can use the word of the day the most times correctly within that day.
<http://dictionary.reference.com/wordoftheday/list/>
- <http://grammar.ccc.commnet.edu/grammar/vocabulary.htm>
- <http://www.english-test.net/gre/vocabulary/meanings/180/gre-test.php>

English Comprehension Skills

- Read a book each month.
- Utilize online grammar exercises.
 - http://www2.actden.com/writ_Den/index.htm
 - http://owl.english.purdue.edu/handouts/general/gl_sentclar.html
 - http://www.collegeboard.com/student/testing/sat/prep_one/improv_sent/pracStart.html

Strong Knowledge of Cultural and Syntactical References from both Hearing and Deaf Culture

- Deaf culture
 - Attend deaf events.
 - Take a sign language class.
 - <http://www.deaf-culture-online.com/index.html>
 - <http://www.aslinfo.com/deafculture.cfm>
- Idioms
 - <http://www.usingenglish.com/reference/idioms/>
 - <http://humanities.byu.edu/elc/student/idioms/idiomsmain.html>
- Colloquialisms
 - http://www.usingenglish.com/links/Slang_and_Colloquialisms/index.html
 - <http://www.word2word.com/slangad.html>

Cultivate a Broad Knowledge Base

- Watch educational programs and keep up with current events.
- Borrow a text book to accompany classes you caption for.
- Discuss with instructors what their goals are for each class session.
- Listen to academic podcasts during your commute.

Strong Summarization Skills

- Record the nightly news or a program from the Discovery Channel or the History Channel. Listen to a short segment (5 minutes or less) and then pause the tape. Summarize the information in a single sentence. Then summarize the same information in 3 sentences and finally a short paragraph. Reword the summarizations until they accurately capture the information in varying degrees of detail.

Fast Typing Speed

- <http://www.typingtest.com>
- <http://www.learn2type.com/TypingTest>

Sources for Practice Lectures

- http://www.apple.com/education/itunesu_mobilelearning/itunesu.html
 - Download iTunes software (free).
 - Go to iTunes Store and choose
- <http://disability411.jinkle.com/>
 - Podcasts on disability related issues.
- http://www.oculture.com/2006/10/university_podc.html

Using Tablet PCs to Integrate Graphics with Text to Support Students Who Are Deaf and Hard of Hearing

Pamela Francis, Michael Stinson, & Lisa Elliot

Abstract

In recent years speech-to-text systems have provided support services to a growing number of deaf and hard of hearing (d/hh) students in mainstream classrooms. Science, technology, engineering, and math (STEM) courses provide some of the most serious challenges to providing appropriate support services to d/hh students. While there is evidence to confirm that speech-to-text systems have successfully supported access and learning for some d/hh students, a remaining challenge for support service providers is the inability to capture graphical information in conjunction with the text. Other support services are equally challenged to provide d/hh students with sufficient access to STEM material. This paper describes the use of Tablet PCs and the C-Print system to provide two support service options for students who are d/hh: real-time notetaking and speech-to-text with graphics. Included are: descriptions of the C-Print Tablet software with graphical input capabilities; information about research trials conducted using the Tablet options, and a discussion of how integration of graphics will affect the role of students and service providers.



In recent years, increasing numbers of deaf and hard-of-hearing (d/hh) students are being educated in classrooms alongside hearing students (National Center on Education Statistics, 1999; Gallaudet Research Institute, 2002). Students receive a variety of support services to accommodate their access and communication needs in these inclusive classrooms. As content material becomes more sophisticated and dense in secondary and postsecondary courses, the need for appropriate support services that match access needs with instructional methods becomes more crucial in order to foster d/hh student success.

A growing concern for educators and the science and technology community is the challenge to make science, technology, engineering, and math (STEM) courses more accessible to students with disabilities, including students with hearing loss (National Science Foundation, 2003). An instructional method common across many STEM disciplines is the use of graphical or non-text-based information including formulas, symbols, charts, graphs, drawings, and the like. Very often, the instructor will, for example, have a formula or illustration on the board or displayed on an overhead and will explain facets of the concept that is visually depicted. True comprehension of the subject material requires that the student looks at the drawing *and* attends to the explanation simultaneously. This requirement can be extremely challenging for d/hh students in mainstream classrooms.

In addition to the challenges imposed by teaching methodology in STEM courses, attributes of three common support service options contribute to these challenges for d/hh students for two reasons. First, d/hh students experience constraints related to the technology of the support services especially when used in STEM courses. Second, competing visual demands for the students occur when d/hh students receive speech-to-text services, or when they speech-read the instructor or watch an interpreter, or, when d/hh students use both an interpreter and notetaker. All add to the barriers faced by students in STEM classes.

Limitations of speech-to-text systems. A growing number of deaf and hard-of-hearing (d/hh) students receive speech-to-text support services in mainstream classrooms. These systems provide a word-for-word or meaning-based display of what is said in class, as well as options for saving the text after class for study. While there is evidence to confirm that speech-to-text systems have successfully supported access and learning for some d/hh students (Elliot, Stinson, McKee, Everhart, & Francis, 2001; Elliot, Coyne, & Stinson, 2006; Elliot, Stinson, Easton & Bourgeois, 2008), a remaining challenge for support service providers is the inability to capture graphical information in conjunction with the text. Research on the usability of speech-to-text systems consistently reports student frustration with speech-to-text systems due to their lack of graphics (Elliot, Stinson, McKee, Everhart, & Francis, 2001; Elliot, Stinson, & Coyne, 2006.)

The lack of graphical information in speech-to-text displays is keenly perceived when speech-to-text support is offered in STEM classes because these courses often include spoken (i.e., vocabulary, explanations, etc.) and graphical information (i.e., diagram, formulas, etc). Because speech-to-text systems are text-based, service providers are not able to capture the graphical information in real time. As a result, deaf/hh students may miss important information.

Limitations of speechreading and interpreters. While increasing numbers of d/hh students use speech-to-text support services, there are still many circumstances in which d/hh students either rely on speech reading the teacher or use an interpreter. In the situations in which a student relies on speech reading or the interpreter alone, there are many times when students may miss an the opportunity to connect the visual information with the spoken (interpreted) message because the instructor's face may be turned away from the student so the student only sees the visual information or because the interpreter is not in the same visual space as the illustration. In both these scenarios, students may miss key information necessary to comprehend the explanation (Marschark et al., 2005).

Limitations of notetakers. Still other students rely on the combination of an interpreter and notetaker for access in mainstream courses. It is common practice for notetakers to take notes by hand, on multipart, pressure sensitive paper, and for students to receive those notes at the end of the day (Hastings et al, 1997). The readability of the notes can be influenced by the legibility of the notetaker's handwriting as well as how well the notes come through the multiple layers of pressure-sensitive paper. Notetakers may also complete worksheets or need to do additional drawings that have to be integrated into the notes packet that the student receives, but explanations relating to those handouts might not be incorporated in the notes. Usually, students and notetakers interact very little, and students do not know what notes have been recorded until they receive them.

Therefore, each of these widely available support services for d/hh students, speech-to-text support, interpreter only, and interpreter with notetaker have limitations for students, especially when used in STEM classroom settings where instruction involves simultaneous, multiple presentation modes. These limitations create barriers for d/hh students that may inhibit student success in STEM courses.

Tablet PC options. A promising new generation of laptop technology, called the Tablet PC, is now available. Tablet PCs provide both typing and graphical—(handwriting and drawing) input. In addition to the standard input option (i.e., typing) of a traditional laptop, Tablet PCs allow the user to write and draw directly on the screen of the laptop, using a special pen, called a stylus.

The C-Print research and development team has adapted C-Print® software to work with the tablet. By expanding the capacity of C-Print software, we have created *two new options* for real-time support. First, by providing students and notetakers with wirelessly networked tablets, C-Print software can now support handwritten, real-time notetaking, which allows students access to their notes as they are being created; and, second, C-Print software can now incorporate graphical information with a real-time display of the spoken dialogue text. With both options, a student using a Tablet PC can add their own notations to the notes, graphics, or text that is being created by the service provider. Worksheets and other electronic media created by the teacher can be incorporated into the real-time display and notes as well.

Use of Tablet PCs will likely help improve service providers' ability to address the challenges of providing support services to d/hh students—especially when class include both spoken and graphical information—such as in most STEM classes. These are the types of classes in which traditional typing only C-Print has sometimes had limited effectiveness; the software modifications will increase the effectiveness of speech-to-text services, as well as creating new opportunities for more traditional, handwritten, notetaking services.

This presentation discusses the use of Tablet PCs and the C-Print system to provide two support service options for students who are d/hh. The first option provides speech-to-text support and graphical information in real-time. The second option provides notetaking support that is viewed in real time by students who are d/hh.

The presentation includes a demonstration of the C-Print Tablet software, featuring the graphical input capabilities. In addition, presenters will demonstrate how graphical information can be integrated into the real-time display, two-way communication, and notes distributed after class, and discuss how the integration of graphics affects the role of students and service providers. The presentation will include findings from a recent study that examines the benefits of using Tablet PCs to provide real-time notetaking and speech-to-text with graphics support services.

Recent research with C-Print Tablet software indicates that it increases academic performance, improves attentiveness in class, and increases student involvement. Presenters will share information about research trials, including: feedback from students, teachers, and service providers; academic performance data; and lessons learned from the research trials.

Methods

Materials

Networked tablets for notetaking. In using the C-Print Pro tablet software for notetaking, the support notetaker and student each have tablets with 10-12" displays that are compatible with Windows XP tablet version, such as the IBM X41 Tablet PC, for *hardware*. These computers have mobile or detachable keyboards, internally built wireless capabilities for networked communication, and a stylus with adjustable settings. To support notetaking, the C-Print Pro tablet *software* has a graphics pane that enables students to impose their own notes in real-time on a transparent overlay "on top" of the notetaker's information that is displayed on the student's tablet. Transfer of information between tablets occurs over a network through the Internet protocol

(TCP/IP) along with a proprietary protocol. Student and notetaker are able to access the different layers for writing and viewing, but the protocol regulates who can add input to a particular layer.

Software for real-time notetaking. The primary application that the project used for the work with networked tablets with notetaker support is Corel Grafigo 2 (Corel, 2005). A key reason for selecting this application is that it is desirable for students to be able to impose their own notes in real-time “on top” of the notetaker’s information that is displayed on the student’s tablet. Grafigo has an “onionskin” transparent overlay that enables students to add and save their own marks and notes as the support notetaker is writing notes. Text windows may be easily created for typed input, and a Library feature is available to organize saved documents. Once created, notes can be distributed in various formats (i.e., .html, .pdf, .doc). Figure 1 below shows a sample of real-time notes created with the software.

The project also used Microsoft’s Advanced Networking Pack for Windows XP to enable the peer-to-peer technology to support wireless communication with Grafigo. Grafigo has received favorable review as a simple graphics program that works well collaboratively (Brown, 2003).

During the notetaking trials, the C-Print Pro software application that supports real-time notetaking was developed to replace Grafigo in future research. However, during the research reported for this paper, real-time notetaking trials used the Grafigo software.

Software for captioning with graphics. C-Print Pro™ tablet software was used for these trials. The software allows a range of ways to produce information, from text to drawing. It differs from previous versions of C-Print Pro software and other speech-to-text services that produce only text. Once created, notes can be distributed in various formats (i.e., .html, .pdf, .doc). Figure 2 represents speech-to-text notes with graphics produced with the new C-Print software.

Figure 1. Real-time Notes Sample

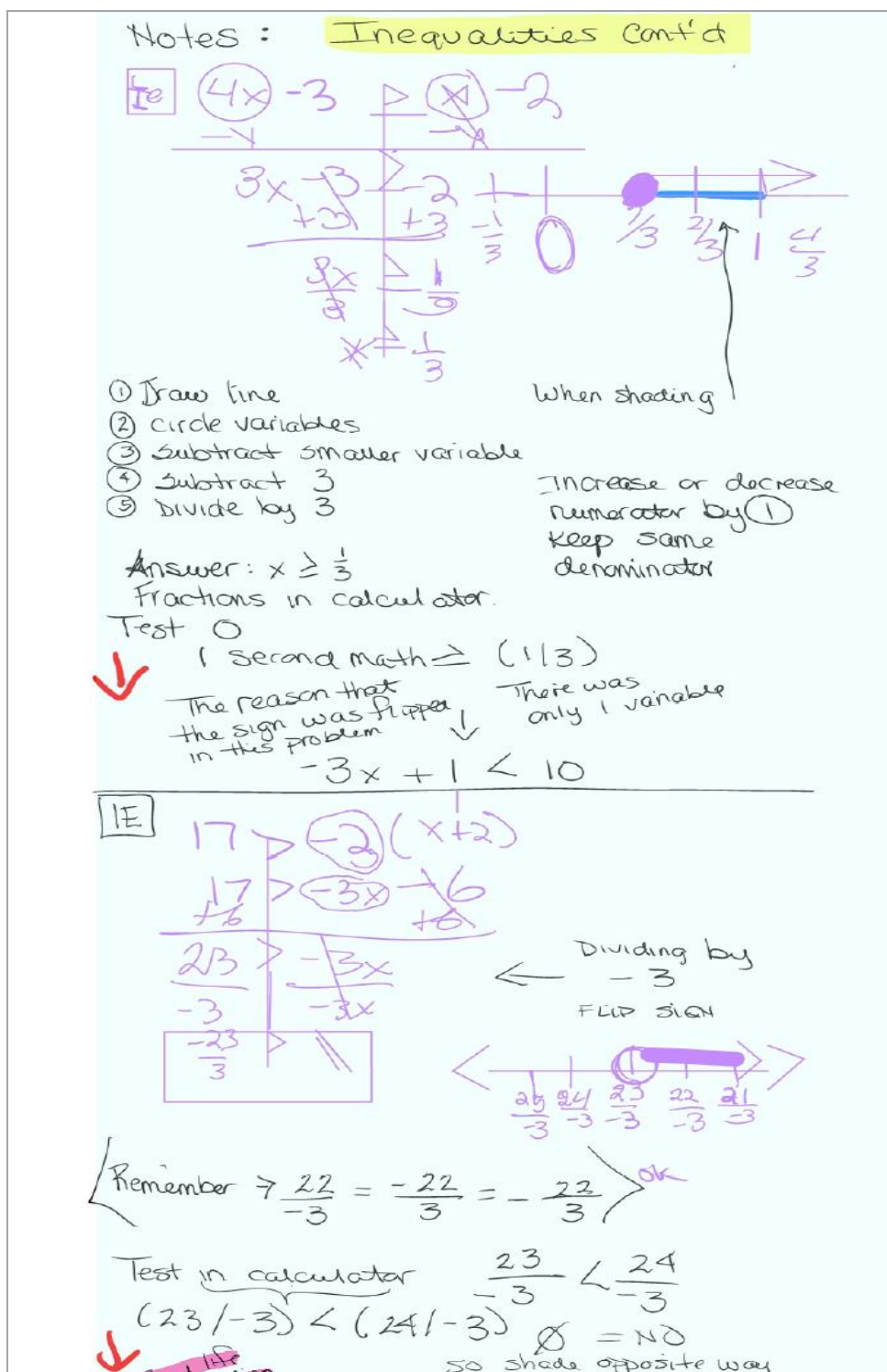


Figure 2. C-Print w/Graphics Notes Sample

November 8 , 2007

Algebra Mrs. Frank

Warm up

$$\frac{|+1|}{9} = 3(a)$$

$$|+1| = 27$$

$$+ = 27 \quad + = -27$$

(2 of 11)

Homework Page 65 13-24
Test Tomorrow


Teacher: Okay. In order to solve the equation the idea is get the whole absolute value by itself. Multiply by 9 (each side). Remember you will end up with two answers when solving absolute value equations. You get two answers because see draw #3

If you were going to do a check...Check both

$$\frac{|+1|}{9} = 3(a)$$

$$|+1| = 27$$

$$+ = 27 \quad + = -27$$



Cierra

$$\frac{|+1|}{9} = 3(a)$$

$$|+1| = 27$$

$$+ = 27 \quad + = -27$$

(0 of 11)

answers.

116

$$\frac{36}{9} = \frac{|r|}{9}$$

$$4 = |r|$$

$$r = 4 \quad r = -4$$

(5 of 11)

Go over homework Page 63 #2 -22

This is one that where the absolute value has something near it.

11/8/2007

Participants

Middle and high school students, (grades 7-11) who are deaf or hard of hearing participated in this study, along with their classroom teachers, and itinerant teachers of the deaf (TODs). Fifteen students (8 females, 7 males) participated in total: 7 students in trials using tablets for real-time notetaking, and 8 students who used the tablet for speech-to-text (captioning) plus graphics. All the students were enrolled in math or science general education classrooms with hearing peers. The students had a pure-tone average hearing loss of 60.40 dB in the better ear ($SD=25.068$). Mean grade level reading ability was assessed at 11.58 (range grade 5-16.9, $SD=4.3676$) using the Mini-Battery of Achievement (Woodcock, McGrew, & Werder, 1994). Additional student characteristics are displayed in Tables 1 and 2 below.

Table 1. Student Characteristics for Students in Real-time Notetaking Trials

Sub #	Sex	Grade	Reading Grade Level	Better Ear HL	Course	Additional Support Services Received Prior To/During Trial			
						Interpret	Note taker	FM	C-Print
001	M	7	7.9	M→Sev	Science	√		√	
002	F	10	>16.9	Mod	Chemistry		√	√	
003	F	10	8.6	Mild	Geometry		√	√	
004	F	8	13.7	Mod	Math		√	√	
005	F	9	15.5	Mod	Math			√	
006	M	7	6.9	M→Sev	Math		√	√	
007	F	11	5.0	Sev	Algebra	√	√		

Table 2. Student Characteristics for Students in Captioning with Graphics Trials

Sub #	Sex	Grade	Reading Grade Level	Better Ear HL	Course	Additional Support Services Received Prior To/During Trial			
						Interp	Note taker	FM	C-Print
008	M	8	n/a	Sev	Math	√	√	√	
009	F	7	n/a	Prof	Science	√	√		
010	M	11	16.2	Mild	Math				√
011	M	11	>16.9	Mod	Pre-Calculus				√
012	M	7	13.3	Mod (CI)	Science	√	√		
013	F	11	>16.9	Mod	Pre-Calculus			√	√
014	F	10	7.1	Mod	Algebra				
015	M	11	6.9	Mild	Chemistry				

Procedure

Students were identified as potential participants by their TODs. Informed consent was obtained from parents or guardians by the TODs. Prior to the start of the in-class field trial, individual students, classroom teachers, TODs and other support staff, and parents or guardians met with two

members of the research team (notetaker or captionist and researcher). During this meeting, the technology was demonstrated and the research procedure was explained. The notetaker or captionist met with the student for an additional half hour before the classroom trial began for additional training.

Classroom trials lasted for 5 weeks. During the trial, students received either the tablet real-time notetaking service or the captioning with graphics service. Any other services that were stipulated in the student's IEP (such as an interpreter, FM, etc.) were also maintained during the 5-week trial. During the real-time notetaking trials, the notetaker took notes in class with tablet and the notes were communicated instantly to the student's tablet. This is different than normal notetaking in which students only see the notes after class. Students added their own notes as needed by adding marks on top of the notes produced by the service provider.

Similarly, during the captioning trials, captionists used the C-Print software to create speech-to-text notes with graphics and the text or graphics were communicated instantly on student's tablet. These notes differed from the usual speech-to-text notes because they included graphics as well as the text of the spoken dialogue. Students added their own notes as needed by adding marks on top of the text or illustrations produced by the captionist.

During the third or fourth week of the trial, the researcher attended one class session. Field notes were recorded. Following the end of the classroom trial, the researcher conducted individual, open-ended, face-to-face interviews with the student, the classroom teacher, and the TOD.

Data Collection

Hearing loss. Data on student hearing loss (unmasked air assessments at 500 hz, 1000 hz and 2000 hz) were gathered from school records.

Reading ability. Data on students' grade level reading ability was assessed with the Mini-Battery of Achievement (Woodcock et al., 1994). This three-section test includes tests identification, vocabulary, and comprehension and takes about 10 minutes to administer. The test was administered to the student by a project researcher.

Communication preference. Students completed a 20-item questionnaire regarding their communication preferences at school and at home, as well as their background and skill in sign language and their use of assistive devices, hearing aids, and cochlear implants.

Teacher rating of student performance. Teachers were asked to rate student performance in academic achievement, learning new vocabulary in the course, and class participation during the trial as compared to their previous performance. The ratings were based on a 1-5 Likert-type scale, with 1=much less than average progress, 5=much better than average progress.

Classroom use. Field notes were gathered during classroom observations. Observational data included topics such as the physical classroom setting; (classroom set-up including student seating arrangement, lighting, etc.) student interactions (student interaction with the technology, other students, and class participation) teacher-student interaction, teaching style, and use of audiovisual materials. Notetaker or captionist behavior was also observed, including interaction with students, teachers, and other supports staff, as well as notetaker or captionist practices. Information gathered during the observations was used during interviews (see below).

User experiences. Semi-structured, face-to-face interviews were conducted with students, classroom teachers, TODs, notetakers, and captionists. A research team member skilled in

ethnographic interviewing techniques conducted the interviews. The same individual also conducted the classroom observations. The interview protocols included a predetermined list of topics, but interviewers encouraged interviewees to pursue their own line of thinking. Interviews were also individualized based on information gathered during the classroom observations.

Interviews included the following topics: impact of the Tablet PC technology on understanding and class participation by deaf/hh students; interaction/comparison of Tablet PC with other accommodations and support services (notetaker, interpreter, FM system, etc.); reactions to electronic or paper text, and descriptions of whether/how/under what conditions it is used by students; advantages and limitations of Tablet PC to providing text and notetaking tools. Additionally, students were asked to describe specific ways in which they use the Tablet PC support services.

For each student who was interviewed, the student's TOD and classroom teacher and notetaker or captionist were also interviewed. Total number of interviews included: classroom teachers (n=15); TOD/Resource Room (n=12); notetakers (n=4); captionists (n=4). (Some numbers do not add up to 15 because some notetakers, captionists and TODs served multiple students.) To the extent possible, parallel questions were asked of the teachers and support staff.

For face-to-face interviews with students, an interpreter was present at the interviews, if necessary, to (a) facilitate communication as needed and (b) voice the signing of the interviewer and respondent onto an audiotape. Verbatim, typed transcripts were generated from the audiotapes and reviewed for accuracy by the interviewer.

Analysis

Descriptive statistics were used to analyze quantitative data due to the small number of participants. Qualitative data gathered in the field notes and interviews were analyzed using content analysis techniques described by Bogdan and Biklen (1998). The research team read all field notes and transcripts and, through discussion, developed a set of code categories based on major topics covered in the interviews. Investigators independently coded their field notes and interview transcripts, meeting regularly to discuss and resolve differences in coding decisions. Data analysis was facilitated by the use of HyperResearch software (Researchware, Inc., 2007). The software allowed researchers to generate reports in which interview data was sorted by code categories and themes. This tool allows researchers to prepare analyses of the data that are supported through extensive use of quotations from participants.

Results

Teacher ratings

Teachers rated student progress during the trial compared to their progress before they received the technology. Teachers rated academic achievement, vocabulary, and class participation. To summarize teacher ratings for the 15 students:

- Teachers rated students as progressing better than before, or the same as before: except for one rating for one student, all ratings were for average progress or better.
- About equal numbers of ratings were for better progress than previously and for the same progress as before.
- For two areas, academic achievement and class participation, there were more ratings of better than average progress than average progress.
- For one area, learning new vocabulary, there were more ratings of average progress than better than average progress.

There was no obvious difference in the pattern of ratings for the notetaking option and for the speech-to-text or captioning plus graphics option.

The complete chart for teacher ratings is shown in Table 3, below.

Table 3. Teacher Ratings of Student Performance During Tablet Trial As Compared to Student Performance Without Tablet

Sub #	Much less than average performance	Less than average performance	Average performance (no difference)	Better than average performance	Much better than average performance
001	A			V	P
002			AVP		
003					AVP
004			V	AP	
005			VP	A	
006			AVP		
007			AVP		
008			V	AP	
009			V	A	P
010				AVP	
011			AP	V	
012			A	VP	
013			AVP		
014			V	AP	
015			V	AP	

A= Academic Achievement

V= Learning New Vocabulary

P= Class Participation

The largest amount of data for the study was qualitative, including classroom observations and interviews with students, their classroom and support teachers, and service providers. Following are several excerpts from these interviews.

Student Feedback

Using tools to remember important information. The tablet software includes tools for marking the text, such as highlighting, and drawing. The following comment shows how the student used the tools to help remember information that is important.

Interviewer: Tell me about those kinds of notes. Did you write, or did you highlight, or did you draw, what did you do?

Student: If it's an important thing that's going to be on a test or something, like one time I was drawing a picture of an atom that I was doing for a project so I drew on the table to make sure I remembered and not forget anything that would be important. And other times I wrote down what was going to be on a test so I wrote it down so I could study.

Integration of electronic classroom materials into display and notes. Another feature of the software is the ability to integrate other electronic classroom materials such as worksheets or PowerPoint slides. The following comment reflects how the student said she benefited from seeing the classroom materials, and being able to see the captionist's notes on this sheet. The student also

describes her ability to add her own notes to the teacher notes which is referred to as sharing space with the service provider:

Student: I thought that was really cool! It was like a mini version, and I was writing on it and um, I like seeing C. (captionist) writing on the teacher's notes and then that way I can add to them myself, and also when I got the notes at home I could have my own notes but I could have C.'s notes too.

Teacher Feedback

Classroom teachers were also interviewed. Several of the teachers remarked that students increased their participation in class, not just in quantity, but also in quality. The following comment shows the qualitative difference—class participation changed from asking questions with the goal of obtaining an understanding to making comments that were based upon already having an understanding of the material being presented.

Teacher: Yeah, in terms of her participation, she is a very strong student to begin with and she obviously takes pride in her work. But it seemed like her participation now is less on, "I don't understand this" but more on, "I just want to repeat and want clarification." So her participation though, may not have improved in terms of how many times she was speaking out, but the information she was presenting to the class was more on target than before.

Service Provider Feedback

Communication between the service provider and the student is another topic that was discussed during interviews. Some providers who used the notetaking option had never communicated with the student during class; the tablet technology was the first time they had experienced this type of student interaction. In the following quote the notetaker explains how she was able to communicate to the student the right way to produce a drawing that the student had been making incorrectly.

Notetaker: "Now I see why, oh that really helped me." Things like that the students would say to me. You know, clockwise, counter clockwise drawing arrows, um, one example was I had a student who drawing in clockwise and counter clockwise, she drew it in backwards. So I drew it in the right way so she would know, and she was like, "Oh, thank you so much."

Lessons Learned

In conducting this small-scale study on adapting C-Print software for use with tablet PCs, many lessons were learned, in particular, from the experiences of notetakers, captionists, and students.

Notetaker perspectives. The biggest transitions experienced in this study were felt by the notetakers, because using a computer to deliver support was a marked difference from traditional service delivery. This change was smoother for notetakers who were more comfortable with technology.

A second, profound difference in notetaker experience related to the ways in which the notetaker interacted with the student. In traditional notetaking services, the notetaker may communicate very little with the student; in the real-time notetaking model, notetakers communicate and interact constantly with students. This new form of notetaking requires negotiation between the notetaker and the student as to how the two will share the space on the tablet "page" and also, who will be responsible for recording content (e.g. student writes down material from board, while notetaker adds commentary or explanation).

Other adjustments that notetakers were required to make included becoming comfortable carrying heavier equipment, taking the time to familiarize oneself with the technology, and adjusting one's schedule with regard to the editing and printing processes.

Captionist perspectives. While captionists have had more experience with C-Print software and laptop technology, changes were still necessary to transition to the tablet. For example, captionists needed to familiarize themselves with the new features of the software and the hardware. They also had to adjust their captioning strategies to decide when it was appropriate to caption or to use the stylus and add information by hand.

Similar to notetakers' experiences, captionists also learned how to negotiate with students about who would record certain information. In addition, in certain circumstances captionists worked more closely with classroom teachers to obtain worksheets and other electronic media before class that could be included on the real-time display.

Student perspectives. Students also experienced role changes associated with the tablet technology. For example, students learned to advocate for themselves in negotiating with notetakers and captionists about what material they (the students) would like to record. Also, students were given the autonomy to take notes or to add annotations for themselves. For some students, these new opportunities were welcome; for others, it was more of a puzzle because the students demonstrated poorer notetaking skills.

Additionally, students had to decide when and how long to look at the tablet. While students expressed a variety of strategies for looking at the tablet, none of the students found it difficult to read the tablet. Depending on the paperwork demands of the class, student wrote more—or less—on the tablet. (For example, in some classes, students were graded on the quality of their notebooks. In these situations, students wrote on the tablet less often.)

Discussion

A variety of support services are available to d/hh students who are educated alongside their hearing peers. In the case of STEM courses, these support services often fall short due to a combination of circumstances, including the nature of STEM educational methods and the unique characteristics of the support services themselves (Marschark et al., 2005; Stinson & Antia, 1999).

A pilot study was conducted involving d/hh middle and high school students who used tablet PCs for either real-time notetaking or speech-to-text with graphics support in STEM courses. Quantitative ratings of student performance by classroom teachers suggested that most students performed at least as well, if not better, using the tablet PC-based support services.

Interviews conducted with students and teachers also referenced positive attributes of tablet-based support services including increased autonomy and more focused class participation for students.

New technology posed new challenges for service providers and students alike. While the software was easy to use, notetakers had the most significant transition to make, moving from a manual system to one supported by a computer. Students and their service providers also encountered new relationships as they negotiated with content and shared notetaking space.

Continued research with these support services will explore the educational impact of tablet-based supports as well as implications of their implementation in STEM classes. It is anticipated that

these research findings will add to the improvement of support services for d/hh students and facilitate students' success in STEM.

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Math-to-Text: Tips and Tools

Sharon Allen & Steve Colwell

Abstract

It is challenging to provide speech-to-text services in math and science classes. Besides the often unfamiliar content of many math and science classes, there are the added challenges of quickly and clearly showing symbols and formulas. This paper will present a range of tools and techniques for meeting these challenges using the most popular types of speech-to-text software.



Special methods are needed to provide real-time speech-to-text services in math and science classes. Handwriting is too slow, and regular typing is unable to quickly produce the special symbols used in formulas and equations. In real-time communication access services, speed is critical. We will discuss ways of quickly typing math and science, especially when using the common speech-to-text software products.

Speech-to-text services in math and formula-intensive science classes often produce ambiguous or unreadable text. In text format, phrases such as “two pi r squared” or “x to the fifth plus two y to the third” may look like English, but in actuality math is indeed, as high school students have always known, a foreign language.

Furthermore, the language of math is a written language, and is “spoken” or translated into English according to agreed-upon conventions. We will use the term “mathlish” to refer to this spoken reading of written mathematics. When this spoken translation is then re-transliterated into printed text, the result can be confusing and may lack the meaning of the original math text.

Computer Math

Mathematicians and engineers have come up with conventions for typing math into scientific calculators and computers, which allow the user to key in common math symbols quickly, and which also increase the readability and decrease the ambiguity of the math. For example x^2 is used for x^2 .

This approach does work. However, these conventions must be learned and are therefore less useful to a deaf or hard-of-hearing student, who in addition to learning the math taught by the instructor would also be required to learn a writing system that her/his classmates would generally not have to learn.

Here are some computer math examples:

Written “mathlish”	Computer math	Written math
2 pi r squared x to the fifth + 2 y to the third x to the fifth + 2y to the third the square root of 9 3 times ten to the ninth H2O2 + 2HCl	2 pi r^2 x^5 + 2y^3 (x^5 + 2y)^3 root 9 3 * 10^9 H2 O2 + 2HCl	$2\pi r^2$ $x^5 + 2y^3$ $(x^5 + 2y)^3$ $\sqrt{9}$ 3×10^9 $\text{H}_2\text{O}_2 + 2\text{HCl}$

The second and third examples above show possible ambiguity that can be introduced when only the spoken “mathlish” is attended to by the service provider.

Better-looking Math

To type math quickly, one must learn how to do two things. First, one must learn to locate special symbols like π and add them to the dictionary of one's speech-to-text software as an easy-to-type abbreviation. Second, one must learn the special commands for adding superscripts and subscripts. We will now discuss specific techniques to do these things using existing speech-to-text software.

Math mode

TypeWell V5 provides an easy way to type math quickly using its special “math mode” feature: Just turn on math mode and type the formula. For instance, type “2pi r2” to get $2\pi r^2$. Type “x5 + 2y3” to get $x^5 + 2y^3$. Type “3x109” to get 3×10^9 . Type “H2O2 + 2HCL” to get $\text{H}_2\text{O}_2 + 2\text{HCl}$.

The most important tip for TypeWell users is to be sure to read through the built-in tutorial, especially the Fields section about different areas of math and science. Also, the techniques discussed below for other systems will work with TypeWell. Start with the Lucida Sans Unicode font in Character Map for use with TypeWell. This can be useful when typing a rare symbol that may not be in TypeWell's built-in math dictionary.

Character Map (for all systems)

In all the common speech-to-text systems (including, for instance, the CART system Eclipse, speech recognition systems like NaturallySpeaking, TypeWell, and the newest C-Print software), you can add special characters to your dictionary. The key is to use the Character Map program that is built into Windows to locate the special symbol needed. Character Map works well once one learns its oddities, discussed below.

Character Map is on the All Programs/Accessories submenu, and may sometimes be within the System Tools submenu of that.

To find the desired character in Character Map, first choose an appropriate font from the drop-down list. Different fonts have different selections of characters. The fonts with Unicode in their names are the most likely to have rare and unusual characters.

Then, locate the character within the font. You can search for the character by name using the “Search for” field. For instance, type “gamma” in the search field and click Search to locate upper and lower-case Greek gamma characters. An oddity of Character Map is that you must click Reset before doing a second search.

Once you've located the desired character in Character Map, click on the character from the grid display and then click Select to put it into the clipboard. Paste the character into the appropriate box in your software for adding a dictionary entry. Another oddity of Character Map is that it includes a New Paragraph code in the clipboard after the desired character. You may want to first paste into text, then select and copy just the desired character without the New Paragraph.

After pasting the character into the dictionary, set it up with an abbreviation of your choice. For instance, you might use the abbreviation *pisym* to type π .

Superscripts (for all systems)

Some software includes a special keystroke to enter superscripts or subscripts. For instance, in C-Print use the ctrl up-arrow and ctrl down-arrow. Look in the software manual for your product to locate the superscript and subscript keystrokes.

Some products may have no way to enter superscripts and subscripts. All is not lost. The most commonly needed superscripts are a raised 2 for squared, and a raised 3 for cubed. These can be typed in most systems, such as in the CART Eclipse software, by using the special symbol techniques of the above section. Use Character Map to locate the raised 2 and raised 3 symbols, and add them to the dictionary. One could for instance use the abbreviation *2** in Eclipse to produce the raised 2.

Although these methods allow one to type superscripts and subscripts reasonably quickly, one might prefer to type *x2* to get x^2 , rather than *x{ctrl-something}2{ctrl-something}*. Speed is of the essence in real-time speech-to-text. One can achieve this to a certain degree by entering the most common polynomial terms into the abbreviation dictionary. Using the special raised-2 and raised-3 symbols above for instance, one can make the abbreviation *x2* give x^2 .

Conclusion

To summarize, by using certain techniques one can type many of the formulas and equations of math and science in most speech-to-text systems.

Captioning and transcribing in math and math-intensive courses requires preparation and awareness of the content that is being taught. We would like to warn service providers not to overdo the use of math symbols, but rather to keep in mind that the students are learning math via English, and that the way math is spoken is an important part of that learning process. However, with an introduction of basic math symbols into one's work, the resultant text will be much more readable and accurate than a straight transliteration of the instructor's spoken translation of the mathematics.

For more information, see <<http://typewell.com/pepnet.htm>>.

Facebook 101



Jennifer Freer & Joan Naturale
Rochester Institute of
Technology
15 April 2008

Abstract

This poster describes how the RIT Librarians use Facebook to increase outreach to their colleges. "Friending" students and faculty on Facebook creates a network of people who can then find contact information (IM email or videophone) and be informed about library services. Promotion occurs by advertising events, offering access to the RIT Library Catalog, creating and joining groups and "friending" students & faculty who then receive status updates. All of this is an inexpensive marketing tool to increase visibility.

What is Facebook?

Facebook is a social networking tool that can be used to improve outreach and marketing efforts.



Facebook Today: Facts and Statistics

- Over 2,000 colleges and universities (85%) and more than 25,000 high schools
- More than 11 million college student accounts already exist and it is projected that 20,000 profiles are added each day
- 85% of college students have a profile
- 69 million active users world wide as of January 2008 with more than 250,000 registrations daily
- 5th most visited site; #1 for photo-sharing (ahead of Flickr)
- 20,057 members in the RIT network

Facts and Statistics

- Over 55,000 regional, work-related, collegiate and high school networks
- More than ½ FB users are outside of college
- Fastest growing demographic is those 25 years and older
- 45% of Facebook users log on everyday for 25 mins daily which adds up to about 2 hrs a week
- 85% log in once a week
- 65 billion page views per month

Terms of Use

- Facebook is a third party service provider and you should honor their terms of use
- They can change those Terms at any time. Do not make this your only means of communicating and promoting your services or getting to know your students.
- This service may change over time but get to know it now so you understand how high school and college students are communicating

Why Join?

People join Facebook because it is:

- used as a website
- a directory
- an online community
- an expression of self
- share interests and hobbies
- a social calendar
- tap into and create networks
- join and create groups

Organizations' Use

- Post info about events-track guest list, updates if place, date/time changes
- Join and create groups
- Make announcements and communicate with members
- Post discussion of topics
- Promote your organization
- Recruit new members

Marketing

- Reach campus community about upcoming programs and services on or off campus (boost event attendance)
- Inexpensive marketing tool
- Add to existing outreach efforts
- Create a group for your department with all or some members contributing
- Support learning communities
- Support professional development
- Post pictures and videos of events

Anatomy of Facebook

- ☐ Profiles
- ☐ Status Updates
- ☐ Groups
- ☐ Discussion Boards
- ☐ Events
- ☐ Photo Albums
- ☐ Applications aka APPS
- ☐ Poke

Status Updates

- Status Updates-See what everyone is up to as they update their STATUS. This is a key way to stay in student's minds.
- Can see if you are online, for IM
- Students will post personal items here about their lives. In using this tool for work post things about availability, job tasks, generalized updates.

Groups

- Organize a group of people with like interests
- Represent an entity or department on campus
- Group examples from the more than 500 at RIT:
 - "Orange and Brown Coalition"
 - "NTID Alumni"
 - "NTID Students"
 - "Interpreting Students Association"
 - "Asian Deaf Students"
 - "Ebony Club"
 - "Dove"

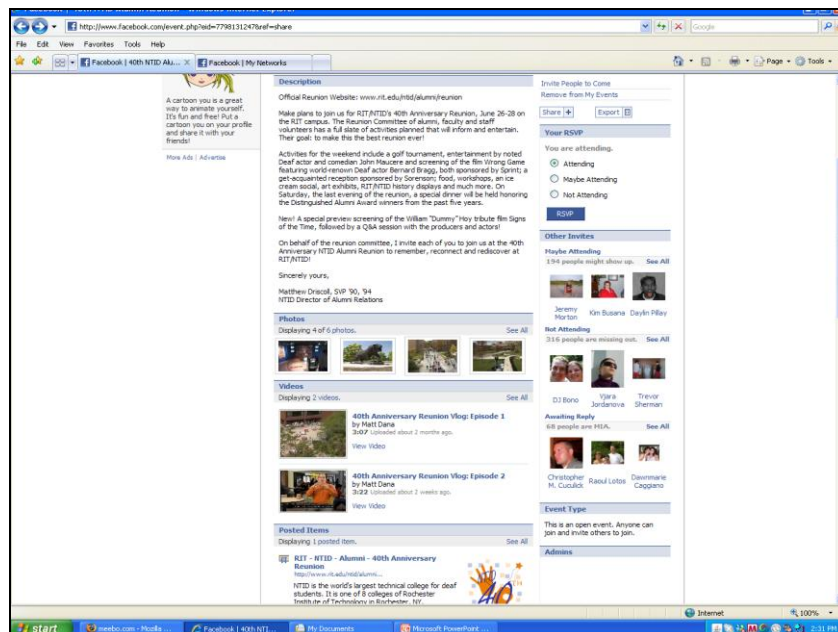
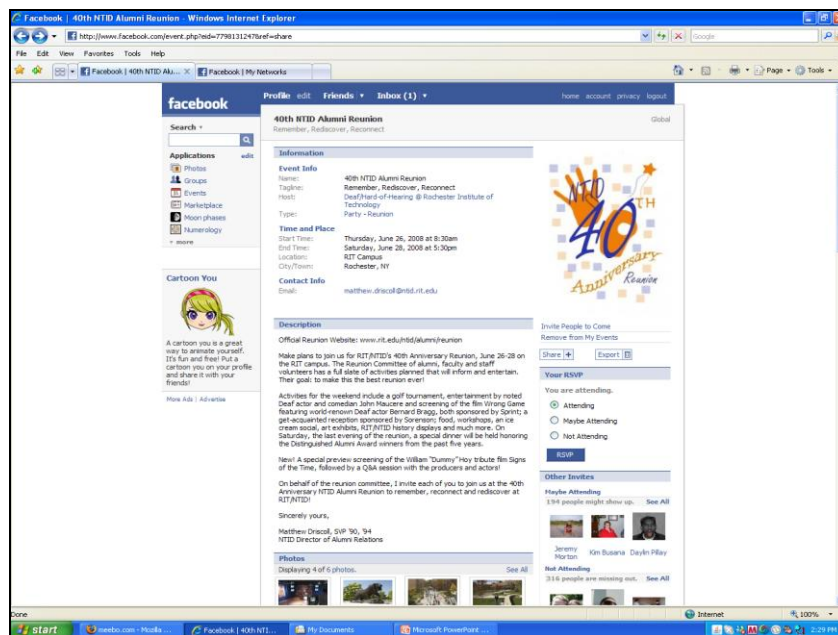
EVENTS

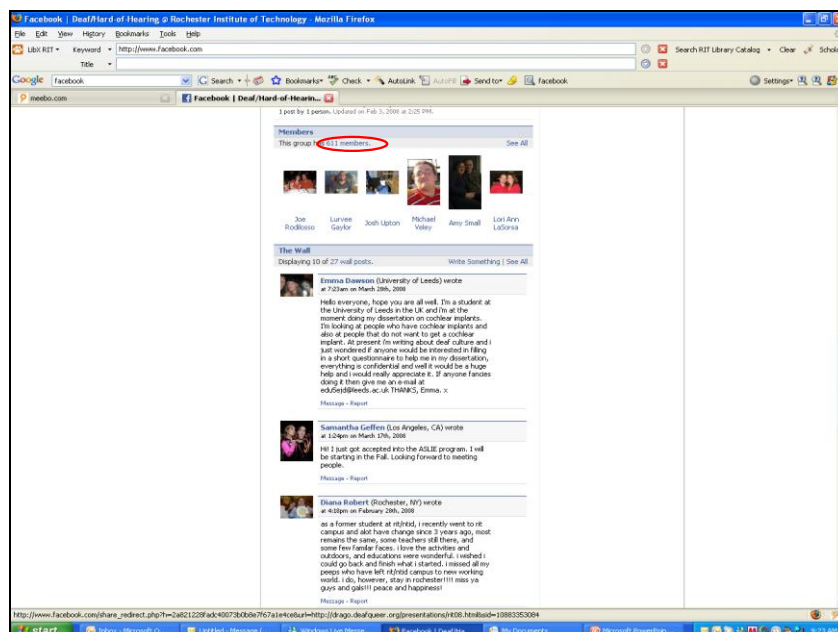
- Create EVENTS in Facebook. You can send invites to friends. If you keep the events “open” friends can invite friends. By doing this you know have some possibilities of “viral marketing” as friends tell friends to go
- You market the event and you see how many people are interested in attending.
- EVENTS get added to the RIT Facebook calendar for others to see when you leave it Open.

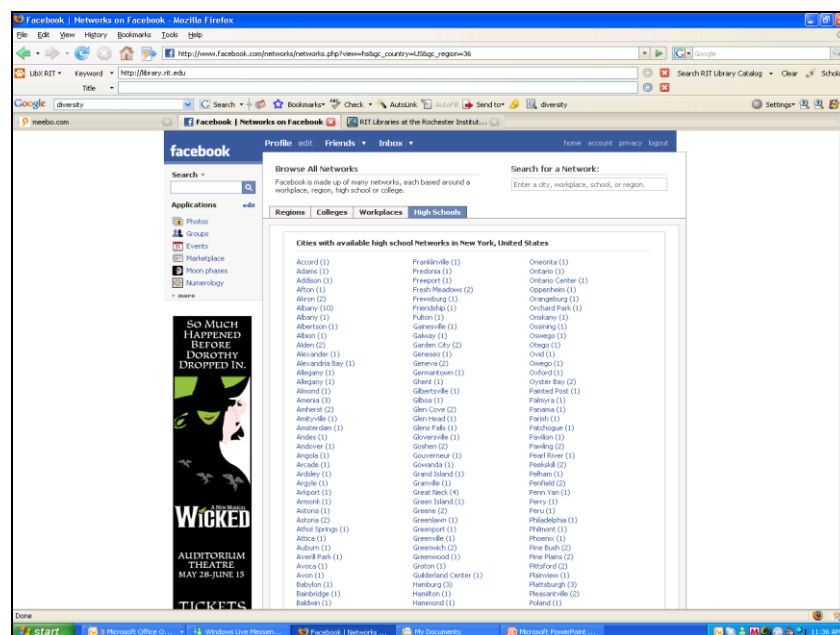
Real Life Examples

<http://rit.facebook.com/home.php?>

- Former students at Austine School in VT found me and are on my friends list
- Interpreter who is in England for the year found me and commented on library resources
- Students see I am online and can contact me via email or IM or videophone
- Keep up with campus events, ie NTID Alumni Reunion







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DIVERSE POPULATIONS

Teaching Your Colleagues and Community About Adults Who Are Deaf and Low Functioning*

Greg Long, Theresa Johnson, Nancy Carr, & Amy Hebert

Abstract

Individuals who are deaf and low functioning frequently receive inadequate attention and service delivery. This is particularly true in education, rehabilitation, and independent living settings. Typically, professionals lack knowledge, resources, and experience with this population. To begin to address these problems, this paper identifies current needs and barriers to service delivery and then provides strategies for successfully working with these individuals, family members, and the broader community. Three levels for potential change are highlighted. The first level includes individual professionals and related service providers who have little deafness background. The second level includes programs and agencies designed to serve individuals who have disabilities. The third level focuses on advocacy for systems change.

** The authors would like to note that terminology used to describe these individuals (i.e., “low functioning”) is unnecessarily negative. We use it, however, in deference to state and federal trends.*



Barriers to Appropriate Service Delivery

Individuals who are deaf and low functioning face a myriad of obstacles in their quest for appropriate service delivery. According to Long and Clark (1993), these individuals are characterized as having limited language and communication skills. These language deficits impact multiple area of life including social and interpersonal skills, decision-making, independence, and employment. The 25th Institute on Rehabilitation Issues (Dew, 1999) described the communication characteristic of persons who are deaf and low functioning as follows:

Presenting poor skills in interpersonal and social communication interactions, many of these individuals experience difficulty expressing themselves and understanding others, whether through sign language, speech and speech reading, or reading and writing (p. 2).

Frequently, supports and necessary accommodations are not available. Barriers to service delivery increase when children leave school and enter the world of adulthood. The “helping system” is complex, fragmented, and based on eligibility, rather than entitlement. There is typically no case manager or other professional to help the family navigate this system. In addition, many families

hesitate to seek employment services for their child, as they do not want to risk their child's Medicaid coverage or Social Security income if the child becomes employed.

Professionals face multiple barriers to providing appropriate services to individuals who are deaf and low functioning. For example, there are few training opportunities to learn about this population. Most graduate training programs in psychology, social work, counseling, and education do not mention the unique needs of these individuals. In addition, there is limited literature about this population. Research into "best practices" to use when working with these individuals is particularly absent. Overall, there is dearth of literature on assessment, intervention, and teaching strategies known to be effective with these individuals.

Finally, the needs of this population are not on the national radar in terms of special populations or funding priorities. Since the 1960s, there has been a sporadic pattern of federal funding, resulting in a history of fragmented and disjointed services, or no services at all. As of July 2008, no federal dollars were specifically directed toward this population. The only source of federally sponsored support for these individuals is Social Security Subsistence funding, such as SSI/SSDI.

Strategies for Service Delivery—Basic Information for Generalists

Training and Education DVD: Collaboration between Region 4 Education Service Center in Texas and PEPNet-West resulted in the creation of a DVD entitled *Unrealized Dreams...Stories of Deaf Individuals With Unique Needs*. This DVD addresses a number of issues related to services and program needs. A companion booklet provides a wealth of information and resources pertaining to communication, assessment, existing programs, internet resources, and more.

The DVD includes three versions of the story (8-, 18-, and 30-minutes long) and may be used in multiple ways. The short version provides a quick synopsis of the population, their needs, and suggested actions to address these needs. This version is helpful when meeting people who may be potential donors or others with a limited amount of time. It provides a concise summary of these individuals, the barriers they face, and related service delivery issues. The two other versions of the DVD provide more in-depth information. The longer versions can also be combined with ideas, topics, and discussion points included in the accompanying training booklet. It would seem particularly helpful to use this approach with professionals who do not have experience or knowledge regarding this population. Overall, the intent of the developers was to provide a product that is versatile in its use.

To obtain a copy of the DVD, contact PEPNet at www.pepnet.org or Region 4 Education Service Center at www.esc4.net.

Strategies for Service Delivery—Programs and Agencies

As noted earlier, providing appropriate and effective services to this population is a complex task. A coordinated and collaborative approach to service delivery is the best strategy. The authors identified three programs that currently provide excellent service delivery with individuals who are deaf and low functioning: Lexington Vocational Services Center, Jackson Heights; Community Outreach Program for the Deaf, Tucson, Arizona; and the Kentucky Office of Vocational Rehabilitation. Contact information for all three programs is included in Appendix A. In addition, the following states have programmatic efforts underway to serve individuals who are deaf and low functioning: Alabama, New York, Texas, and Pennsylvania.

The Lexington Vocational Service Center provides a variety of services and is well known for its job coaching program. A job coach or communication specialist is an important support to ensure barrier free communication. While job coaching can serve as the link to effective communication

there are few people trained to work in this capacity. In addition, almost no programs offer job coach training to work with this population. One notable exception is the San Antonio College Interpreter Training Program. It offers an Associate in Applied Science in American sign language/deaf support specialist.

As a state-wide program, the Kentucky model is an exciting new development. The Division of Deaf and Hard of Hearing Branch of the Kentucky Office of Vocational Rehabilitation designed the program. Staffing includes four state coordinators, as well as coordinators for interpreting services; hard of hearing, late-deafened services; deaf services; and deaf-blind/"deaf at-risk" services. A special intake form has been designed for the deaf "at-risk" consumer which is global and attempts to identify community supports. The four state coordinators meet administratively to plan, develop resources, and identify future needs. In the future, a case manager will be hired to work with each RCD and the at-risk consumers. A combination of life skills, job clubs, and support services is being developed. Kentucky will become a model for a uniform, state-wide service system created and administered by a vocational rehabilitation agency.

Strategies for Service Delivery—Advocacy for Systems Change

In order to address the needs of persons considered deaf and low functioning, we must advocate for systematic change. One issue that should be addressed is effective service provision. Too often, gaps in service lead to poor vocational outcomes. When thinking about effective service provision several important concerns need to be considered: qualified service providers, barrier free communication, presence of secondary disabilities, effective transition planning, and individualized services.

Qualified Service Providers: The Committee on Deaf, Deaf Blind, Hard of Hearing, and Late Deafened under the Council of State Administrators of Vocational Rehabilitation (CSAVR) developed a model state plan. This plan includes a detailed explanation of what constitutes a qualified service provider. Although this document focused on the profession of vocational rehabilitation, the general principles have applicability to service provides in many other professions as well. A copy of the plan can be downloaded from CSAVR (http://www.rehabnetwork.org/committees/committee_deaf&deafblind.htm).

Barrier Free Communication: Inadequate communication skills are one of six key characteristics of persons who are LFD (Hurwitz, 1989; Long & Clark, 1993; Watson, 1997; Watson, 1998a, 1998b). Enhanced service provision with persons who are LFD requires an effective and appropriate communication assessment. Long and Alvares (1995) described an ecologically-based, functional communication assessment model for use with these individuals. This model emphasizes the person's communicative competence in relationship to environmental demands and available supports. Building upon this work, Long (1996) developed an evaluation tool entitled, "Assessing workplace communication skills with traditionally underserved persons who are deaf." This measure uses a four-step approach to (a) describe the individual and his/her communication skills, (b) evaluate the communicative demands of a particular work environment, (c) compare the individual's skills to critical communication requirements in the work environment, and (d) identify and/or develop supports and interventions to make a better fit between consumers and their communication skills and environmental demands.

In 2005, Long collaborated with the Midwest Center for Postsecondary Outreach (now known as PEPNet-Midwest) to develop a website entitled *Communication Accommodations for Postsecondary Students Who Are Deaf or Hard of Hearing* (<http://pdccorder.pepnet.org/media/greglog/>). It targets Disabled Student Services (DSS) coordinators, students, families, and faculty. The website provides specific suggestions for

communication accommodations based on the type of environment (e.g., lectures, group discussions, labs) coupled with a consideration of the individual's hearing loss (i.e., deaf, late-deafened, hard of hearing), communication preference (i.e., oral, signing, cueing), and literacy skills (i.e., low literacy, literate). Because individuals who are deaf and low functioning have limited literacy skills, many of the accommodations suggested in the website would be appropriate for this population.

Presence of Secondary Disabilities: Many people identified as deaf and low functioning have secondary disabilities. One way to enhance service provision is to tap into alternative sources of funding. Developmental Disabilities Councils typically have funds to provide extended supported employment services for consumers with cognitive disabilities. Often there is a waiting list for these services. As such, consumers are encouraged to sign up for services several years before they are of employment age. People who are also legally blind may be able to receive additional services from the Services for the Blind. Additional resources and information for community rehabilitation programs who serve consumers who are deaf and low functioning can be found at: <http://www.pepnetnortheast.rit.edu/publication/tipsheet/commrehab.html>.

Effective Transition Planning: A key to career attainment is effective transition services that include family, social, environmental and academic support. Under federal law, secondary schools are required to develop transition plans with students and their parents, as well as a plan for employment after graduation. Although the concept of developing a plan of transition is good in theory, it often does not lead to job attainment.

Effective transition planning should include participation in career development programs. Unfortunately, career development programs designed for people who are deaf or hard of hearing are scarce. Furthermore, career development programs for persons who are deaf and low functioning are non-existent. PEPNet's new *iTransition* (<http://pepnet.org/itransition.asp>) program offers a comprehensive approach to career planning that could serve as a model for developing similar career development tools for persons who are LFD. Another PEPNet product that provides career stories of individuals who are deaf and hard of hearing is the series *Achieving Goals* (<http://www.netac.rit.edu/goals/menu.html>). *Achieving Goals* has a video series component as well as online videos of deaf professionals who can serve as career mentors.

Individualized Services: A strategy for implementing a program of individualized services is person-centered planning (PCP). Person-centered planning requires multi-agency coordination and collaboration. It also provides consumers with equal opportunity and access to services. In addition, it also creates an optimal system of social and environmental supports. Implementing PCP ensures non-duplication of resources and services. This model of service is consumer directed, person-centered and emphasizes consumer choice. The National Association of the Deaf proposed implementing PCP into the creation of their plan, *A Model for a National Collaborative Service Delivery System Serving Individuals who are Low Functioning Deaf* (National Association of the Deaf, 2004).

Conclusion

The primary goal for this document was to share resources that could be used to teach about the issues faced by the people who are deaf and low functioning. These issues are not new. The problems and barriers faced by this population remain the same. In fact, the same group of people has been advocating for systematic change for many years. As already stated, our field has had many advocates who have pushed for funding, resources, and ongoing programs and services for this population. We have created many position papers, written many articles in journals, and presented on the needs of persons who are deaf and low functioning at numerous conferences.

Effective and appropriate service delivery should lead to a true and positive impact on successful outcomes. To achieve this goal requires continued funding. In addition, multidisciplinary research should be supported to develop, assess, and implement proven assessment strategies, interventions, and accommodations.

At this point and time, the hope of federal support has diminished along with support for many other community services. It is incumbent upon each of us to find creative ways to seek funding and support, either on a local or state level. One avenue to find like-minded professionals is to attend a conference. For the past several years, Theresa Johnson has coordinated a conference in Houston, Texas on the needs of students who are deaf and low functioning. This year's conference is scheduled November 20-22, 2008. We plan to use this conference (and others) to continue our dialog about this population. Help us share information and resources. Use the links provided in the article to learn more. For additional information, please check the PEPNet website (www.PEPNet.org). Also, feel free to contact any of the authors directly via e-mail. Your interest in service provision for this population is critical. We invite you to help us build an interdisciplinary cadre of professionals committed to appropriate and effective service delivery for individuals who are deaf and low functioning. Please let us know if you have additional information or links you feel may be helpful. We look forward to ongoing collaboration with you.

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Appendix A

Lexington Vocational Services Center
30th Ave. and 75th St.
Jackson Heights, NY 11370
www.lex.nyc.com

Community Outreach Program for the Deaf
268 West Adams St.
Tucson, Arizona 85705
<http://www.angelfire.com/az2/valleyctrofdeaf/copd.html>

Kentucky Office of Vocational Rehabilitation
Deaf and Hard of Hearing Services Branch
209 St. Clair
Frankfort, Kentucky 40601
Contact: Janis Friend
More information about the Kentucky Model State Program can be found at:
www.dvr.ky.gov/programs_services/publications/Merged%20Monograph%20of%20LFD%20Presentation1.pdf.

College Students who are Hard of Hearing: A National Task Force Publication on Addressing Service Models of an Underserved Population

Debra Brenner, Douglas Watson, & Cheryl Davis

Abstract

Students who are hard of hearing are often forgotten in the classroom, misunderstood in terms of service provision, and overlooked by social service agencies as they transition from secondary education to postsecondary education and training. Many students do not receive accommodations that would be appropriate for their needs. Professionals who are experienced in providing services to students who are deaf frequently do not understand the very distinct and unique communication differences faced by students who are hard of hearing. To address these issues, a national collaborative project developed a publication designed to help state offices of vocational rehabilitation and postsecondary education institutions to better identify and provide more effective services to this population.



It is not uncommon for students who are hard of hearing *not* to request services until after classes have already started. Many students do not fully understand how different a postsecondary education program will be from what they experienced in high school; in that sense, hard of hearing students may be just like any other student. The pace of each class may be much quicker than those in high school. The classes may have many more students, and the professor's expectations may be different. In addition, accessing support services may be a new and different experience for an incoming student who is hard of hearing; the responsibility for requesting services shifts from the school to the student. Some students may decide to "make it on their own" while others realize that the available services are tools to help them compete with parity.

Experienced service providers realize that students who are hard of hearing face very real access issues. It's not as simple as just wearing a hearing aid to make everything clear. With the advances in technology, students have many more choices than ever but individual differences still play an important role in how well the student understands the information presented. An accommodation that works well for a lecture may not be effective in a laboratory. Flexibility and creativity are essential components to providing an accessible environment.

During the 1990s surveys of campus officials led to estimates that between 20,000 and 25,000 deaf and hard of hearing students were attending the nation's 5,000 colleges and universities. By contrast, self-report disability items on federal surveys of students in college on financial aid lead to estimates of between 258,000 and 346,000 college students with hearing loss in 1986 and 1990.

Schroedel and Watson estimate this number to now be over 400,000. Reasons for the significant difference in the numbers can be attributed several factors: a) many hard of hearing students were not disclosing their hearing loss and not requesting Disability Support Services (DSS) assistance; b) some students may not have thought that communication technology or academic support services would be helpful; c) some do not fully appreciate the effects of their hearing impairment upon communication and social interaction; and d) some may have been unaware of services and equipment and did not know how to request them. Both Vocational Rehabilitation (VR) and DSS service professionals need accurate information about the numbers of persons their programs are to serve. Knowing the true numbers of deaf and hard of hearing students on campus can greatly aid a program coordinator to advocate for more resources, enhance support services, and train program staff.

In a collaborative effort, the Postsecondary Education Program Network (PEPNet) and the University of Arkansas Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing (RT-31) supported a project to identify and clarify the special needs and issues of students in postsecondary settings who are hard of hearing. Task force members were Heidi Adams (IL), Sam Atcherson (SD), Tim Beatty (CA), Debra Brenner (GA), Randy Collins (AZ), Patty Conway (KY), Cheryl Davis (OR), Carol Kelley (MS), Louise Montoya (PA), Marcie Sacks-Botto (IL), John Schroedel (AR), Larry Sivertson (CA), Pat Tomlinson (NJ), Jim DeCaro (NY), Denise Kavin (NY), Doug Watson (AR), and Marcia Kolvitz (TN). This project provides national leadership to developing recommended guidelines to help postsecondary institutions better identify and serve this population, and complements work that will be done by the Council of State Administrators of Vocational Rehabilitation (CSAVR) later this year.

It is with great pleasure that we offer this publication, *Hard of Hearing Students in Postsecondary Settings: A Guide for Service Providers*. Its purpose is to provide up-to-date information and resources about those factors that affect students who are hard of hearing as they plan for or participate in postsecondary education and training. Chapter 1 provides insight into who the population of students is and what it's like to experience hearing loss. Chapter 2 presents demographic information and the implications for service delivery. Preparing for the transition from secondary to postsecondary education is discussed in Chapter 3. The overview of vocational rehabilitation services in Chapter 4 provides other service providers, consumers, and parents with a better understanding of the services available to eligible consumers; in addition, it features several state agencies with specialized services for individuals who are hard of hearing. Chapter 5 offer the service providers a model with specific information about the kinds of services and support that can be offered by a postsecondary education or training program. Because students don't spend all of their time in the classroom, Chapter 6 emphasizes how access in other campus settings can be provided. Finally, Chapters 7 and 8 address technology that can play a significant role in communication access for students who are hard of hearing; these chapters discuss hearing loss and the use of hearing aids and assistive listening devices, and also describe other types of technology that can be used effectively in a variety of settings.

We hope that the use of this guide will not be limited to services providers at the postsecondary level. Information and resources included in it may be very helpful to students and parents as they discuss future plans. Teachers, transition specialists, and other related staff from secondary programs also may use this as a tool when working with students as they transition from secondary to postsecondary education and training programs.

We view transition as a collaborative effort among several groups of people who can provide resources and support. Students and their families may find it helpful to work closely with high school faculty and staff, transition specialists, vocational rehabilitation counselors, educational

audiologists, and other related professionals. We strongly encourage students to visit colleges, universities, and vocational training programs to see where the best “fit” is for them. Meeting with students or consumers at these institutions can provide additional information that can be valuable when making decisions about the future. Other online resources—many of which are included in this publication—can be very helpful throughout the process.

Free downloadable pdf files are available through the PEPNet Dissemination Center. Go to <http://pdcorder.pepent.org> and search for product 1219. Printed, bound copies of this publication are also available at cost through Lulu. Readers can go to <http://stores.lulu.com/pepnet> to view PEPNet resources available through this source.

For those who are interested only in the technology chapters, this information is available as a stand-alone document from the PEPNet Dissemination Center at <http://pdcorder.pepnet.org/media/1221Demystifying.pdf>.

Serving Hard-of-Hearing Students: Interpreting Documentation, Understanding Functional Impact, and Providing Appropriate Accommodations

Samuel R. Atcherson & Cheryl D. Davis

Abstract

Service providers face a number of challenges in evaluating the needs of hard of hearing students who rely on auditory/oral and/or print means of communication. While documentation for some students clearly justifies specific accommodations, for others it does not. Many service providers are faced with the difficult task of justifying to administrators why the services are necessary. This session provided participants an understanding of the functional limitations created by hearing loss and the access options available, arming them with knowledge and confidence to advocate for students' access needs. Participants had the opportunity to talk with an audiologist who is himself a cochlear implant user to have their hearing loss and documentation questions answered. Hearing assistance technologies also was available to explore.



The impetus for having this all-day workshop was the awareness and concern that there was a poor transfer of information between service providers and audiologists for students with hearing loss in the post-secondary education setting. When clear information is not adequately transferred, it may be difficult to develop and justify reasonable and appropriate recommendations for students. Whatever information is gathered significantly impacts documentation that can either benefit or harm a student's educational access and process. The reasons for any poor transfer of information may be related to the assumptions of knowledge that both audiologists and service providers have about each other. For example, audiologists may assume that services providers who work with students with hearing loss know precisely what the student needs. Meanwhile, service providers may assume that audiologists will provide complete, detailed evaluations and recommendations that will work with the school's available technology and resources, and ultimately meet the needs of the student. Alternatively, it may be that both parties are unclear about what questions need to be answered, and what information to provide.

Our approach to resolving some of these concerns is to educate service providers about certain audiology-related topics in order that they may be empowered to ask of audiologists specific information or documentation they need to best serve their students. Additionally, having a solid understanding of various issues involving assistive listening devices (ALDs) is considered of great importance. Due to the constraints of space, we will highlight some of the major points from our presentation. More detailed information and relevant references can be obtained in other

publications, both of which are free and accessible on-line (Davis, Atcherson, & Johnson, 2007; Atcherson, Davis, & Johnson, 2007).

Overview of Anatomy and Physiology of Hearing

Basic understanding of the anatomy and physiology of the hearing is essential for understanding how hearing loss leads to various functional difficulties (below), which will then help us develop appropriate expectations of what hearing assistance technology can and cannot do for students. Minimally, the peripheral auditory system involves the pinna, ear canal, ear drum, middle ear space (and structures), cochlea, and the hearing nerve. The purpose of the pinna and ear canal are to naturally provide a boost of high frequency information, particularly those of speech sounds. The middle ear begins with the ear drum whose physical movement via the ossicles (three tiny bones) becomes pressure waves in the fluid-filled cochlea. Within the cochlea, the pressure waves vibrate resonating membranes that neurally activate the sensory hair cells within the cochlea. There are two different types of hair cells that have fundamentally important roles. Outer hair cells are motile, whereby they contract to help amplify soft sounds entering the auditory system. However, it is the inner hair cell that actually relays sound information to the brain. When sounds are sufficiently loud, the inner hair cells are automatically activated. However, the processing of sound does not stop here. Sound processing enters the central nervous system where it is processed by the brainstem and auditory cortex (bottom-up processing) and is mediated by higher-level factors such as attention, cognition, and previous experience with sound (top-down processing). Thus, the auditory brainstem and brain are highly influenced by maturation, the environment, and any alterations anywhere along the auditory pathway (from the hearing loss in the cochlea to brain injuries). Specifically, the auditory brain is “plastic” and any change in the brain can either be beneficial or harmful thus having important implications for people with hearing loss. A final important consideration about the auditory system is that it is a binaural system and it works optimally when there is a clear, unaltered signal in both ears!

Hearing Loss is More Than Just Loss of Audibility

Most people seem to appreciate that people with hearing loss need sound to be louder. If damage to the cochlea is restricted to the outer hair cells or if something is blocking sounds from reaching the cochlea, then most hearing aids are perfectly sufficient to restore loudness. However, hearing is much more complex than we realize which can lead to a number of other functional difficulties. When the inner hair cells are damaged, in addition to outer hair cell damage, hearing difficulties are compounded. When inner hair cells are damaged, the neural signals to the hearing nerve and to the brain become progressively distorted as the severity of hearing loss gets worse. Specifically, people with inner hair cell damage experience a loss of clarity (or crispness) of speech sounds. Behaviorally, they may complain that sounds are muffled. They may miss subtle differences between similar words, they may not hear consonants, they may be unable to separate speech from background noise, they may be unable to tell where a sound is coming, and so forth. These difficulties are often related to poorer frequency discrimination, poorer temporal (time) discrimination, and the loss of any binaural advantages (i.e., input to both ears). The most obvious benefits to hearing with both ears is 1) two ears produces a perceptual “doubling” of loudness compared to one ear, 2) the brain relies on input from both ears to localize sounds, and 3) hearing in noise is much better with two ears due to spatial separation cues (since the speaker and background noise are often in different locations). Secondary to hearing loss caused by a damaged auditory system are the issues of increased likelihood of listening fatigue, possible tinnitus (ringing in the ears), and balance issues (another inner ear structure). These secondary issues may also need to be taken into account when planning recommendations for students with hearing loss.

Understanding the Audiogram (and its Limitations)

Terms such as sensorineural hearing loss, conductive hearing loss, and mild and profound hearing losses are often familiar to service providers who work with students with hearing loss. Less familiar to service providers are how to adequately interpret an audiogram and how to use associated information such as speech recognition thresholds (SRT), word recognition (WR) scores, tympanometry, and acoustic reflexes (AR). Information that could be gleaned only from an audiogram is explained here in this section, but other tests and their results will be discussed in section “Familiarization with Audiology Services”.

The audiogram is a graph used to plot the softest level of sounds across a range of pitches (Figure 1). The stimuli used are typically pure tones or modulating tones produced by an audiometer. From the top of the graph to the bottom, intensity levels (loudness) increase from about -10 dB HL to about 110 dB HL. From the left of the graph to the right, frequencies (or pitch) increases from 125 Hz to 8000 Hz, more or less representative of the range of sounds associated with speech. For adults, normal hearing is defined as any threshold that is 25 dB HL or softer at all tested frequencies on the audiogram. Young adults with normal hearing are expected have on average a threshold of 0 dB HL across frequencies. When thresholds exceed 25 dB HL (i.e., indication of hearing loss), it is common practice to take the air-conduction pure tone average (PTA) of the thresholds at 500, 1000, and 2000 Hz to determine the degree (or severity) of hearing loss. The ranges for different degrees of hearing loss are as follows: Mild for PTAs between 26 and 40 dB HL; moderate between 41 and 55 dB HL; moderately-severe between 56 and 70 dB HL; severe between 71 and 90 dB HL; and profound 91 dB HL and greater. Additionally, it is also helpful to note the shape (or configuration) of the thresholds for more telling information. In particular, you might see that hearing is better in the lower frequencies compared to the higher frequencies (a common configuration of hearing loss).

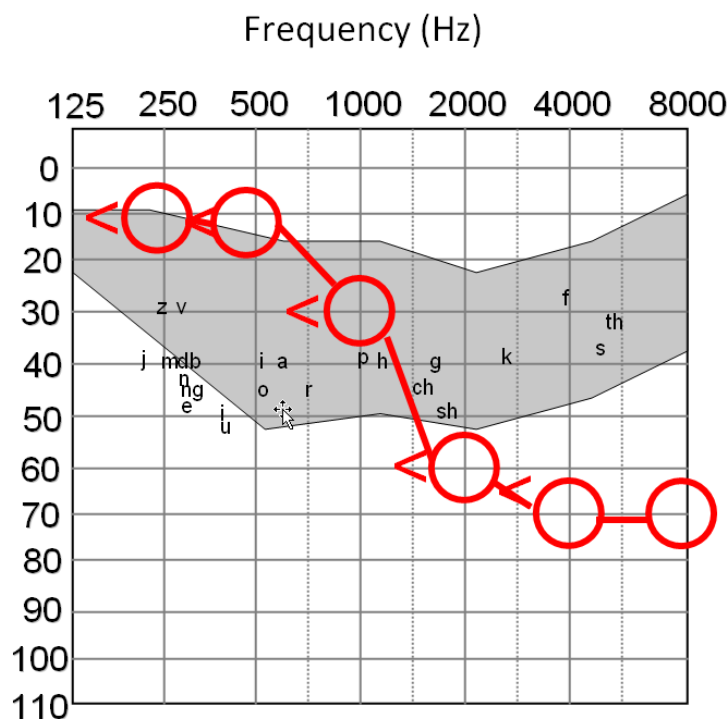


Figure 1. Threshold audiogram with speech sounds (shaded area showing average conversational speech range)

Right and left ear air-conduction thresholds are plotted as “O” and “X”, respectively. Air-conduction testing occurs through the use of headphones or earphones. Right and left bone-conduction thresholds are plotted using “<” and “>” or “[“ and “]”, respectively. Bone-conduction testing occurs through a bone vibrator placed on the skull behind the ear, and the vibration bypasses the ear canal and middle ear and directly stimulates the cochlea. In cases where there are large air-conduction threshold differences between ears, you will see the “[“ and “]” symbols used to denote that a masking noise was put into the “better ear” while testing the “poorer ear”. Based on this information, a sensorineural hearing loss (SNHL) is determined when both air- and bone-conduction thresholds overlap each other on the audiogram; a conductive hearing loss (CHL) is when air-conduction thresholds are greater than 25 dB HL at any frequency while the corresponding bone-conduction threshold is at least 10 dB better (called an air-bone gap) and within the normal range; and finally, a mixed hearing loss is one when both a SNHL and CHL occurs, the thresholds of which both are greater than 25 dB HL. The configuration of thresholds for a right ear, high-frequency SNHL is shown in Figure 1.

When interpreting the results of an audiogram, it is often helpful to visualize what parts of speech or everyday sounds are too soft or inaudible (see Figure 1 for example). When using audiograms, the reader should be aware of at least three things: 1) speech sounds actually vary quite widely in intensity and have energy at more than just the one frequency depicted; 2) audiograms do not indicate which hearing functions are likely to be affected; and 3) audiograms should be used only as one aspect in the interpretation of what a student with hearing loss may need. It is at this juncture that we alert the reader that there is more to be gathered than just the audiogram alone!

Hearing Instruments: Not Just Hearing Aids

Analog and Digital Hearing Aids

There has been a boom of hearing instrument technology in just the last decade. Not only are we dealing with hearing aids and cochlear implants, but there are also lesser known technologies that remain on the market for specific types of hearing loss. One of the biggest changes in hearing instrument technology has been the shift from analog hearing aids with turn-screws for changing the gain and tone to highly sophisticated digital hearing aids that are programmed by computer with various “listening” programs that are mathematically manipulated by the hearing aid’s internal computer chip. Some of the features worth mentioning in digital hearing aids include directional microphones, noise reduction, and feedback management. Directional microphones involve the use of two microphones (one in the front and the other in the back) and anything that is “common” between the two is cancelled out (though never entirely). Anything that is not “common” is amplified. This may be especially helpful when listening to an instructor at the front of a room in a noisy classroom. Noise reduction is a strategy of the hearing aid to reduce background noise (which tends to be lower in frequency) while amplifying speech sounds (particularly higher frequency sounds). Although research does not show an improvement in speech understanding with noise reduction, it does improve listening comfort. Finally, feedback management involves suppressing any “squealing” or “hearing aid feedback” coming from the hearing aid. In the past, when a hearing aid was squealing, we would turn the volume control down. However, this reduces the audibility of sounds and makes it more difficult to understand. With digital feedback management, the hearing aid suppresses the feedback on its own while minimally adjusting the volume. Another big change is that older hearing aids (analog or digitally-programmable analog) had manual switches (Off, Microphone, or Telephone) and now we may see hearing aids with buttons to change between listening programs, including the use of a telephone. Despite all of these innovative developments, no hearing aid is perfect because of some technological constraints, and because the digitally-amplified and manipulated signal still has to travel through a damaged cochlea (recalls outer and inner hair cells).

Frequency Transposition and Bone-Conduction Hearing Aids

Two less common, but beneficial hearing aids worth discussing are frequency transposition hearing aids and bone-conduction hearing aids. Frequency transposition hearing aids were designed for people with residual low frequency hearing and unaidable mid to high frequency hearing (due to dead hair cell regions). These hearing losses tend to be called “rapidly-sloping” or “precipitous” due to their steep audiogram configurations. Functionally, these people may be unable to detect high frequency sounds even with regular hearing aids (see Figure 2A). A frequency transposition hearing aid not only amplifies sounds, but it also “transposes” high frequency sounds to a lower frequency region where the better hearing is. The result is that any high frequency sound that is transposed will have the quality that it is lower in frequency, but is now detected! One participant used a terrific analogy by saying, “Robin’s chirp now sounds like Raven’s caw”). Although the transposed sound will be, in some cases, unnatural, wearers of this technology remark at how they can now hear high frequency speech sounds and birds chirping; however, research does not currently indicate that it provides significant speech understanding improvement. Bone-conduction hearing aids, as the name suggests, are for people who have chronic, medically-unresolved conductive hearing losses. Either of these two lesser-known hearing aids can be used with assistive listening devices as would be expected for most other hearing aids.

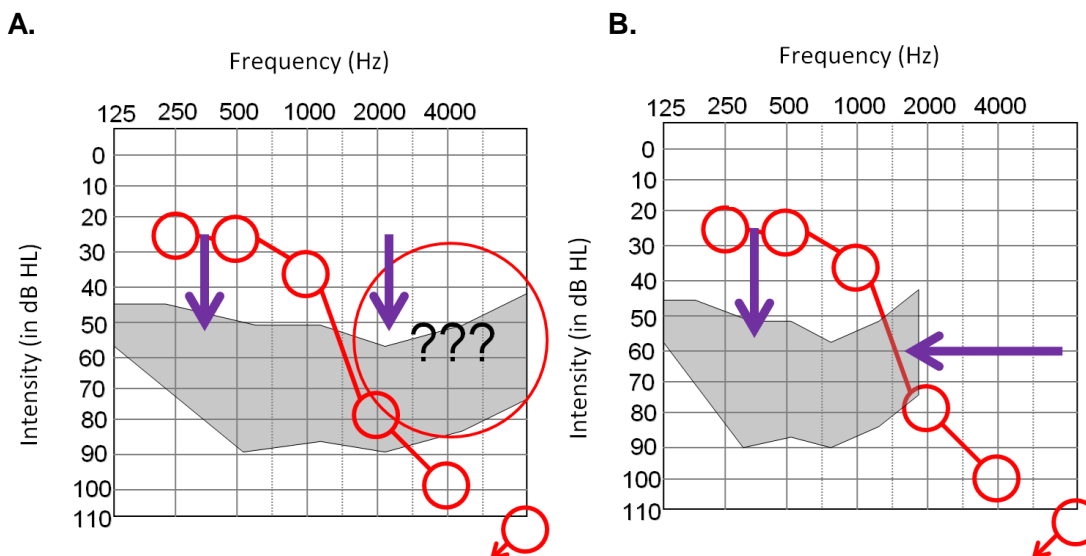


Figure 2. A. Precipitous hearing loss showing the amplified (arrows) conversational speech range (compare to Figure 1). Notice that high frequency sounds are completely missed even when speech is amplified. B. The conversational speech range is not only amplified (arrow), but also transposed (arrows) where the person’s residual hearing is.

Implantable Hearing Devices

Cochlear implants have clearly penetrated mainstream culture and it has been said that there are over 100,000 people worldwide with this amazing technology. Fundamentally, cochlear implants are used when people with hearing loss have little to no residual hearing remaining, and both speech understanding and/or environmental awareness is not satisfied with even the most powerful hearing aids. In contrast to hearing aids, cochlear implants do not amplify sounds, but rather provide direct electrical stimulation to the hearing nerve. Although cochlear implants have the ability to improve thresholds for many users, the functional outcomes between users varies significantly, which are due to history of hearing loss, age at onset, prior hearing aid use, prior communication abilities, and status of entire auditory system, to name a few. Therefore, we should avoid the assumption that all cochlear implant users will have the same benefit. While cochlear

implants have been around for several decades, there are some recent trends that have been developing that are worth discussing. More and more we are seeing people with two cochlear implants and several research studies have shown benefit of two over one. Hybrid cochlear implants—part cochlear implant for high frequencies and part hearing aid for low frequencies—are also being studied. Finally, there seems to be some benefit for cochlear implant users who take a bimodal approach by continuing to use their hearing aid in their non-implant ear. The bimodal approach may not be acceptable if the extent of the damage in the non-implant ear is so severe that there is simply too much distortion.

Sound and Setting

The above information helps to clarify how the hearing mechanism functions with or without technology, but it does not explain human behavior. There is a great deal of variability in how individuals respond to hearing loss. They may be able to communicate well in some situations but experience a great deal of difficulty in others. Lacking other information, service providers may hold a number of misconceptions or beliefs: (1) the label “hard of hearing” indicates the individual does not have a serious impairment, (2) people who can hear well enough to make a phone call would not qualify for an accommodation, (3) a classroom accommodation would not be necessary if one is not needed in the intake or application interview, (4) clear speech indicates that the person does not have a severe hearing loss, (5) people who speechread do not need additional assistance, and 6) hearing aids provide satisfactory access. Let’s look more closely at some of the other factors involved in successful communication.

First, what type of communication is taking place? Does it involve an informal conversation with a known individual, group participation, or lecture? In an intake interview, for example, the counselor is usually using his or her best listening skills and maintaining eye contact. This gives the listener full access to the speaker’s face. Facial expressions and body language greatly facilitate understanding. In a lecture in school or a training or meeting at work, there is usually much less give and take in the conversation. There is limited eye contact and minimal opportunity for response or feedback; it is less likely to occur in an optimal listening environment; and at the same time, the listener is held completely responsible for the information presented.

A major listening challenge for individuals with hearing loss, though, is group discussion. It is important to appraise the variety of information a person with normal hearing picks up auditorially to understand why this is a challenge. In a large group of people, we are able to locate the direction a sound is coming from, whether the speaker is male or female, and identify whether the speaker is a child or adult. We might even recognize the voice so we know who we are looking for. These differentiations will be blurred for the individual with a hearing loss. With normal hearing, we also glean other information that may help us socially. The person may have an accent that we could comment on, may speak passionately about the topic, or may come across as insecure or even condescending. We also hear grammatical information and cues about when to interrupt or ask a question. Without these cues we can easily make a social misstep which others might misattribute as rude or socially inept behavior.

With few exceptions, there is little argument that in academic, employment, and social settings, hearing and understanding speech is vital to our functioning. So how much speech does one need to hear in order to have access to the entire message or to succeed? Hearing 75 or 80% sounds like a lot...but is it enough?

As an example, hearing loss in the higher frequencies is the most common type of loss. In looking at a mapping of common speech sounds by frequency or pitch and decibel (dB) or loudness, it can be seen that even a mild high frequency loss means the individual loses the sounds s, f, t, h, p, k, th,

sh, ch. These are extremely common sounds and provide pluralization and tense information. When these key sounds are missing, the message becomes ambiguous.

In looking at a mapping of common speech sounds by frequency or intensity and decibel (dB) or loudness, it can be seen that even a mild high frequency loss means the individual loses the sound

The above sentence is the second sentence in the previous paragraph. Only the high frequency sounds listed above have been removed. Even though the reader is reading and not listening, it is easy to see that the individual is not missing a word here or there, but missing sounds in many words. Not counting the list of sounds at the end, 74% of the letters of the original sentence could be heard, but only 37% of the words are left intact. Being able to hear 75% of a message may seem adequate, but functionally it is devastating, especially in a classroom environment.

The final piece to understanding the bigger picture of the challenge of hearing is the issue of background noise. Both hearing aids and cochlear implants use a microphone to collect sound, and neither discriminates perfectly between speech and background noise. In research conducted by Blair (1990), students with normal hearing understood clearly as long as the speech was 6 dB louder than the background noise. Students with hearing loss, though, required speech to be 15-25 dB louder than the background noise. This concept is known as the signal-to-noise ratio.

In addition to a strong signal-to-noise ratio, two other properties of sound impact the listener's ability to receive sound—distance and reverberation. Distance from the sound source also has a dramatic impact on the ability to hear. Consider that the average speech is about 65dB at 3 feet. At about 4 feet (for example, the first row in a classroom), the intensity drops to about 53dB, and at 16 feet (about the fourth row), the intensity is only 41dB. With or without a hearing aid, it would be beneficial to sit closer to the sound source.

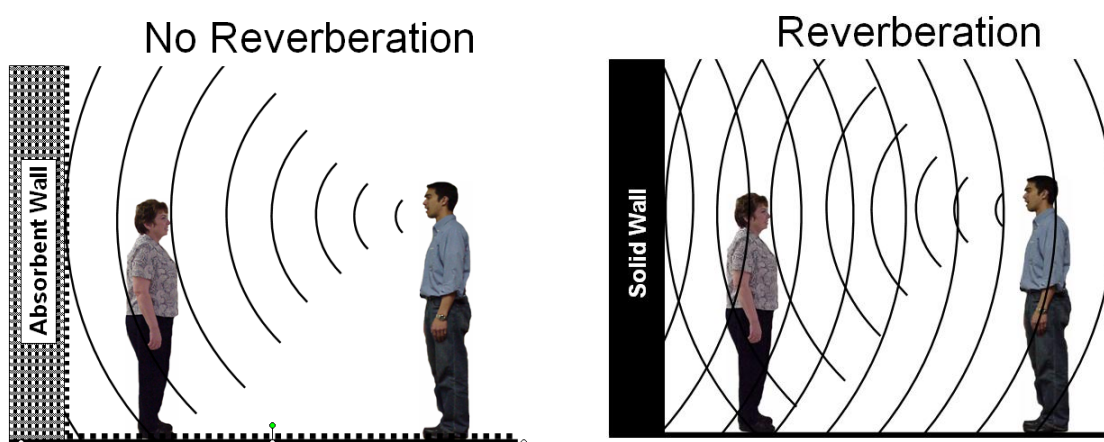


Figure 3. Visual representation of reverberation.

Reverberation is the third characteristic of sound that hearing aids and cochlear implants cannot overcome. Reverberation is the time required for the intensity of a sound to drop 60 dB once it has stopped being produced. The longer the time, the more of an echo, and the muddier sound becomes (see Figure 3). Assistive listening technology can help overcome these problems.

Assistive Listening Devices

Assistive listening devices (ALDs) consist of a microphone, a transmitter and receiver system, and a coupling device, such as headphones. The speaker talks into the microphone. The microphone is

attached to a transmitter, which sends the signal across a limited distance to the user's receiver. The only sounds being transmitted are those coming through the microphone. The user's receiver picks up the signal and sends it to the coupling device, such as headphones. There is a volume control on the receiver, so that the user can turn it up or down as needed.

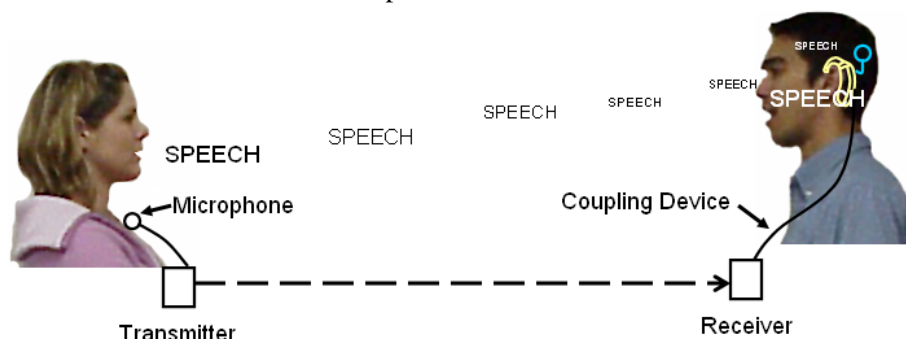


Figure 4. Assistive listening devices transmit sound without losing intensity.

The beauty of ALDs is that they improve the signal-to-noise ratio and eliminate or minimize the effects of distance and reverberation (see Figures 4 and 5).

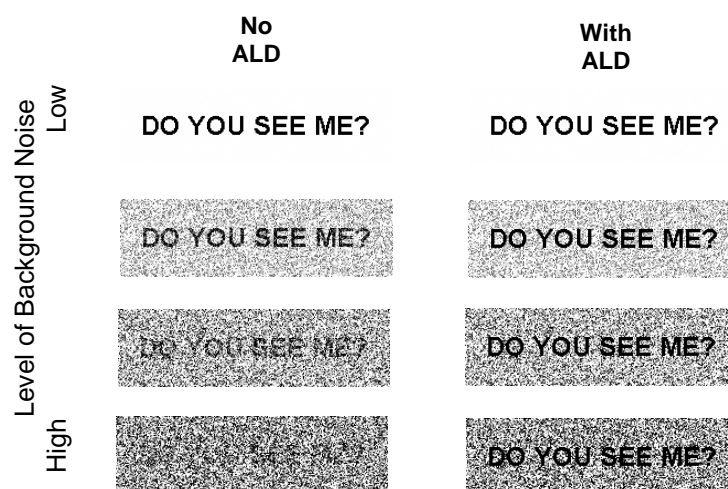


Figure 5. Visual representation of the impact of background noise with and without ALDs.

There are three major transmission systems related to ALDs: FM, infrared, and induction. The personal FM transmitter is about the size of a pager, and has an on-off switch and a jack for a microphone. The instructor plugs in the microphone and clips it close to his or her mouth, turns the transmitter on, and begins speaking. The FM receiver looks very similar and, like other receivers, includes an on-off, volume control, and a jack for headphones or another coupling device. The user wears the receiver to intercept the signals and plugs in headphones or another coupling device to relay the sound from the receiver to the ear (see Figure 6). FM uses radio waves to transmit the signal across the distance, like tuning into a radio station.



Figure 6. Comtek AT-216 Personal FM System.

Infrared (IR) systems use infrared light to transmit the signals, similar to remote controls for televisions. IR transmitters must be plugged into a power source. Most of them collect sound from an existing public announcement system, although there are home versions that are used with television sets.



Figure 7. Directear 810 Infrared TV System with stethoscope type receiver.

The electromagnetic induction loop is the only system that is properly referred to as a “loop.” The system consists of a loop of wire that is powered by an amplifier and a microphone (see Figure 8). The amplifier must be plugged into a power source. The wire loop transmits electromagnetic waves that carry the signal. An area as small as a table or as large as a room can be looped.



Figure 8. Oval Window Microloop.

If the consumer's hearing aid has a built-in telecoil, no external receiver is needed. The user would enter the looped area and change his or her hearing aid setting to telecoil mode to pick up sound signals. Unfortunately, hearing aids sold in America are not always fitted with telecoils, and only recently have they been built in to cochlear implants. In order for those without hearing aids (or those without telecoils) to use the system, an induction receiver must be used. These receivers, actually a telecoil in a box, look like the FM receivers described above and headphones can be plugged into them to transmit the sound to the ear.



Figure 9. Oval Window (left) and Univox (right) induction listening systems. Coupling Devices

Headphones and earbuds are the most commonly used devices to transmit sound from the receiver to the ear. If the individual does not have hearing aids or if the hearing aids do not have telecoils, the user is limited to acoustic methods such as headphones or earbuds. Some users remove their hearing aids to use headphones. This may be because of comfort or because of a problem with feedback (squealing) when covering the hearing aid microphone. This means the consumer loses the benefit of his or her hearing instrument.

If the hearing aids have telecoils, there are two other listening options (see Figure 10) that use induction. One is the neckloop (on the right): A neckloop is a loop of wire that plugs into the receiver in the headphone jack and is worn around the neck. The neckloop gives off a signal (a magnetic field) that is picked up by the telecoil. The neckloop can even be worn under clothing, depending on the strength of telecoil, the thickness of the neckloops, and the severity of the hearing loss. As with the induction loop system, using the neckloop requires that the hearing aid be set to the telecoil mode.



Figure 10. Silhouette and neckloop coupling devices.

Silhouettes look like flattened, behind-the-ear (BTE) hearing aids and they hook behind the ear just like a BTE hearing aid. They will work with either BTE or in-the-ear hearing aids that are fitted with telecoils. Because they are closer to the hearing aid than a neckloop, they provide a stronger signal for more severe losses. Using the telecoil further reduces room noise because the hearing aid microphone can be turned off when the hearing aid telecoil is activated. Now the only sound being

picked up is what is coming across the system's microphone. With the hearing aid microphone off, it cannot receive room noise or anything that is not said into the ALD microphone.

Direct audio input (DAI) is an option on some models of behind-the-ear (BTE) hearing aids that allows an external audio source to be plugged directly into the aid (see Figure 11) via a patch cord. It is also how external microphones and assistive listening devices are coupled to both behind-the-ear cochlear implants and older models with body worn processors.

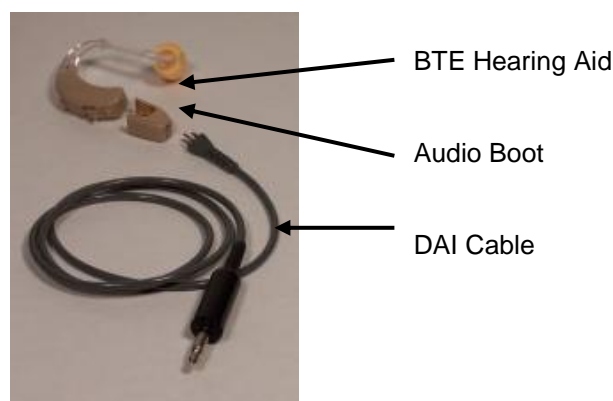


Figure 11. Direct Audio Input components.

This brief overview cannot include all of the options available. New options, such as Bluetooth compatible neckloops, have become available since this workshop was presented. For more detailed information, see the full publication *Demystifying Hearing Assistance Technology*.

Familiarization with Audiology Services

Audiologists are state-licensed professionals (most states require licensure) with Masters- or doctoral-level degrees. The scope of audiology practice is broad, which, in addition to testing all aspects of hearing and fitting hearing devices, also includes balance function assessment, counseling, tinnitus and hyperacusis testing and therapy, and intra-operative monitoring alongside surgeons. For the purposes of this discussion, we will focus on audiology services common to students in post-secondary settings.

Comprehensive Hearing Evaluation

The typical comprehensive hearing evaluation involves the taking of a case history, otoscopic inspection, pure tone threshold testing, speech recognition threshold testing, and word recognition testing. As needed, audiologists may conduct tympanometry, acoustic reflex testing, otoacoustic emission testing, or evoked potential testing. It is important that we understand that the tests that make up an audiologist's test battery should be driven by complaints, inconsistencies, and any potential "red flags". Audiologists, as well as third party payers, are discouraged from using a test battery approach that includes the same tests on every patient. Table 1 shows a description for each procedure or test included in a hearing evaluation.

Once the comprehensive hearing evaluation is completed, the audiologist will often summarize the case history, interpret the results of the evaluation, and make formal recommendations based on the reported hearing complaints. The recommendations may include, for example:

- A referral to see a physician for any medically suspicious findings for the cause of hearing loss, or any sudden, unexpected changes in hearing loss (possible follow-up hearing evaluation may be required)

- A return visit to talk about new or updated hearing devices (both of which may require multiple visits for selection, fitting, and fine-tuning adjustments)
- A referral to see another specialist for related issues (speech-language therapy, psychological adjustment counseling, balance function assessment, etc)
- Educationally- or vocationally-appropriate suggestions or resources to assist the student

Table 1.

Procedure or Test	Description
case history	Detailed report of hearing complaints, past and current medical history, and familial history of hearing loss.
otoscopic inspection	Visual inspection of the outer ear and behind outer ear, and otoscopic inspection in the ear canal and ear drum.
pure tone threshold	Air- and bone-conduction testing seeking the softest sound that can be detected across a broad frequency range. Pure tone average (PTA) can be calculated from air-conduction results at 500, 1000, and 2000 Hz. The PTA should closely match the SRT. The lower the PTA, the better the hearing.
speech recognition threshold (SRT)	Bisyllable words are presented seeking the softest level at which words can still be understood. The SRT should closely match the PTA. The lower the SRT, the better the hearing.
word recognition (WR)	A fixed list of monosyllable words presented and the WR score is the total number correct in percent. The higher the WR score, the better the hearing.*
tympanometry	Assesses the function/health of the ear drum and middle ear through sound pressure. Helps to confirm conduction hearing losses. No behavioral response required from the patient.
acoustic reflexes	Assesses the function/health of the hearing nerve, lower brainstem, facial nerve, and the Stapedius muscle in the middle ear. Helps to rule out neurologic lesions. No behavioral response is required.
otoacoustic emissions (OAEs)	Assesses the function/health of the outer hair cells in the cochlea. Outer hair cells should naturally amplify sound sounds. Lack of OAEs suggests outer hair cell damage at least a moderate hearing loss or conductive hearing loss. No behavioral response is required.
evoked potentials	Assesses the neural function/health of the cochlea, hearing nerve, and most auditory brainstem structures non-invasively using electrodes placed on the skin. Helps to rule out auditory neuropathy/dys-synchrony and tumors on the hearing nerve or brainstem, or helps to confirm severer hearing losses. No behavioral response is required.

* It is not appropriate to subtract the WR score from 100% to estimate the amount of hearing loss (e.g., If the WR score is 74%, is not appropriate to say that one has a 26% hearing loss.)

Some Audiology Service Caveats

Most audiologists are involved in the practice of providing comprehensive hearing evaluations and providing hearing aid services, but they may not be routinely involved in the distribution of assistive technology, particularly assistive listening devices. There seems to be an assumption on the part of both audiologists and their patients that assistive technology may not be needed above and beyond a set of hearing aids, a loud television, or a loud telephone. While some assistive technology can be cumbersome and cost-prohibitive, the reality is that people with hearing loss are often unaware of such technology. For that reason alone, it is imperative that audiologists discuss these additional and often beneficial technologies. In keeping with this important role, audiologists also need to anticipate the circumstances in their patient's educational, professional, or personal lives where hearing aids may simply not be enough. By not keeping assistive technology in mind, audiologists may fail to come up with creative solutions for attaching hearing aids to amplified stethoscopes, listening headsets offered at movie theaters or shows, or even personal music devices (CD and digital mp3 players).

Documentation Issues

It is common for audiologists to provide updated hearing evaluation reports that only include the results of most necessary tests, such as a otoscopy, air-conduction pure tone threshold check, and speech recognition threshold check. The reason for this is that some audiologists have had the luxury of working with the same patients over several years. When patients do not report any significant changes, fewer tests may be conducted than might otherwise be considered for a new patient. Echoing an earlier statement, we must be specific about what we need from the audiologist.

When the audiologist does not (or is not able to) provide some thoughts about functional impact of hearing loss with and/or without hearing technologies, there are some practical and informal ways to assess this using available scales of communication function. These include the Client Oriented Scale of Improvement (COSI; Dillion, James, & Ginis, 1997), and the Hearing Handicap Inventory for Adults (HHIA; Newman, Weinstein, Jacobson, & Hug, 1991).

The previous sections have hinted at the need for a greater level of understanding of the functional impact of hearing loss caused by various anatomical and/or physiologic pathologies of the auditory system, strengths and limitations of the audiogram (the graph only), the various benefits and caveats of hearing technology, considerations involved in assistive listening technology, and the role of audiologists. Simply put, this is a lot of information one has to have a good grasp of. Rather than burdening any one professional with the collective task of figuring out what a single student with hearing loss needs, perhaps we need to open the lines of communication by being more specific about what we need from each other. With appropriate signed release for information for example, if we ask for an "audiogram" from an audiologist to document hearing loss, it is possible that the audiologist may send or fax a single piece of paper that contains the name of the student, the name of the audiologist who conducted the test, the date of testing, and all the results of the comprehensive hearing evaluation with a bunch of symbols, letters, and numbers. Unfortunately, the service provider working with the student will then have to decipher the information from that one piece of paper in order to formulate some goals and needs. Rather than taking this approach, service providers could be more specific about what they need. We suggest that service providers ask not only for the results of the comprehensive hearing evaluation, but to also request a brief case summary, a lay interpretation of the hearing evaluation, some conclusions about the functional impact of hearing loss, and make formal recommendations. Even more important is the need for the audiologist to make some judgments about any technologies the student is currently using. This will help to determine if new or updated hearing technologies are necessary, and it will help determine if current or future technologies are compatible with a service provider's existing resources.

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REHABILITATION ISSUES

From 0 to 99: Creating Services for Individuals with Hearing Loss Around a Core Program at the Community Level

Heidi Adams

Abstract

Outreach to individuals who are hard of hearing can be a real challenge! The opening of a hearing clinic in our community based rehabilitation agency created an opportunity to develop a framework of services to attract and serve these individuals. This session described how this process unfolded at the Center for Sight & Hearing, a community rehabilitation program in Rockford, Illinois, which serves individuals with hearing loss and vision loss. Stumbling blocks, funding, surprises, and lessons learned were discussed in this interactive session.



Outreach to individuals who are hard of hearing can be a real challenge! In 2006 the Center for Sight & Hearing met that challenge when we opened a hearing clinic in our community based rehabilitation agency. This is an account of our dreaming, planning, and the stumbling blocks we encountered during that process.

The Center for Sight & Hearing is a community based rehabilitation program, or CRP. CRPs provide direct services (e.g. assessment, training, counseling, placement, case management) to consumers with disabilities. They may serve individuals with a variety of disabilities, or specialize in one area such as vision or hearing loss. The Center for Sight & Hearing is a PEPNet-Midwest Outreach Site. PEPNet, the Postsecondary Education Program Network, is a national consortium that provides resources, information, in-service training, and expertise to enhance educational opportunities for individuals who are deaf or hard of hearing and their families through four regional centers.

Let's begin with a brief history of the Center. In 1956 the Winnebago County Assoc- Lions' sale of bouquets of roses, an annual event that continues to this day. The facility contained a bowling alley and Olympic-sized swimming pool. Eventually members of the Deaf community began to frequent the center and programs and services were expanded to meet their needs. A Low Vision Clinic opened in 1970 due to the initiative of a retired ophthalmologist who volunteered his services to make it a reality. In 1985 the name was changed to the Center for Sight & Hearing Impaired; the word "Impaired" was dropped from the name in 1998. After a rehabilitation counselor was hired in 1991, further evolution brought new programs in employment, and independent living skills.

Through her resourcefulness, an assistive technology demonstration and sales center called Simple Solutions was created. With all of these changes, the original facility no longer met the needs of customers or staff, so in 2003 a new “house that roses built” was completed. The new facility included an area designated for a hearing clinic and a soundproof evaluation booth.

Today the Center for Sight & Hearing, a 501(c) 3 not-for-profit agency, provides comprehensive services for individuals with hearing loss, vision loss, or both. Our mission is “To help individuals with a vision and /or hearing loss live independently.” We strive to provide one-stop shopping, including provision of assistive technology, training in its use, and follow up services. In late 2004, our existing services included a well-established low vision clinic, strong relationships with the health care community, and a basic referral, scheduling, and billing process. We had strong ties to the Deaf community, including the Deaf Senior Citizens. We were providing employment services, and sign language and speechreading instruction. Communication Services included on-site interpreter services while C-print captioning and remote services were in development. In the new facility, Simple Solutions, our assistive technology resource center, occupied a larger space and served individuals seen in the low vision clinic as well as those with hearing loss referred by professionals in the community.

Our vision for the future included providing comprehensive hearing services to our community, thus fulfilling the promise made by our name. We envisioned a hearing clinic and support services that were affordable for everyone, including Medicaid and Medicare recipients. To do that we needed testing equipment, an audiologist, and funding for start-up costs. In 2005 we submitted a grant request to the Lions Clubs International Foundation for \$75,000. The number of natural disasters throughout the world during that period had a negative impact on funding, but we received \$54,750 for testing equipment and hearing aids. Moreover, the grant was contingent on our receipt of matching funds from Lions District 1-D, monies that we used for part of the audiologist’s salary. We were ready to go! Our next step was to form a Hearing Clinic Committee composed of staff members, consumers, stakeholders, and audiological consultants to assist with planning and provide feedback. Consistent with the Center’s efforts to improve our business practices, we developed a business plan, making it easier to secure funding and business partnerships. We opened the clinic doors in August, 2006, with the audiologist scheduled 1½ days a week.

Before the year was out, the audiologist was scheduled four days a week. We expected to primarily serve adults receiving Medicaid and Medicare. However, today we are serving both adults and children and expect the number of children to continue to increase. In FY 2006-2007 we provided:

- 189 audiological exams
- 236 hearing aid evaluations
- 85 hearing aids for first time users
- 47 hearing aids for experienced users
- 202 hearing aid checks
- 7 persons had cerumen (wax) removed from their ear canals.

We are drawing customers from far outside our local service area because of our affordability and follow up services. Our audiologist also does consulting work for third-party payers.

By all accounts, this new program with its supporting services was very successful. It has not been perfectly smooth sailing, however. There were several things that we should have done:

- We should have thought “bigger.” Although we knew the need for affordable services was great, we were surprised by the number of people who came to our doors.
- We should have planned from the outset to serve children. Children and adolescents are the

fastest growing sector of our customers, and that trend is expected to continue. In fiscal year 2006-2007, services for children increased from 1% to 18%.

- We should have had a more sophisticated and better organized system for referrals, scheduling, and billing. Software to help us manage those tasks is in the planning stages now.
- We should have been aware of the intricacies in seeking public funding. Remember that name change from Center for Sight & Hearing *Impaired* to Center for Sight & Hearing? Unfortunately, the change had never been registered with the state or the IRS. Issues with the state were resolved very quickly, but it took the IRS seven months to complete the process. After finally getting Medicaid approval, we realized that the audiologist needed to change his code from that of his previous workplace. In the meantime, Medicaid ran out of money!
- We should have been more aware of the length of time between service provision and reimbursement. We received our first checks just prior to this presentation.
- We should have paid better attention to the design of the clinic space: there were no phone lines or network connections in the hearing clinic area.

There were also some things that we should not have done:

- We should not have limited our audiologist to 1½ hours a week. Within a year he was working 4 days a week.
- We planned to limit our services to adults and, as noted earlier, children are the fastest growing demographic for our hearing services. The equipment we chose was geared for adults and does not allow us to test very young infants.

What principles can we draw from this experience that we can apply in general to the process of developing new services in an already established program? The most important concept is thoughtful planning, a process very similar to the one that businesses use to place themselves strategically in a competitive market. The first step is to look critically at your strengths, weaknesses, opportunities available, and the threats, or barriers that you will have to contend with. This is often called SWOT.

In the case of the Center for Sight & Hearing, our strengths included our well-established presence in the community; our positive working relationships with professionals, further strengthened by their involvement in our planning process; our role as a Selection Center for free telecommunications equipment; our assistive technology retail store; and our strong support from the Lions' Clubs. On the other hand, as we embarked on this project, we had a minimal amount of "up front" money, a rudimentary referral, scheduling, and billing system, limited experience working with Medicare and Medicaid, a very basic web site, and very few AT items for people to try.

Opportunities abounded for us. There was a huge need for affordable hearing services, a market not met with current services. Our new audiologist had strong ties with local agencies that were delighted to be working with him. Our staff was knowledgeable about hearing loss and the issues that surrounded it. A hearing clinic would complement our existing services. One threat, or perhaps challenge is a more appropriate description, was the concern of local audiologists, who felt threatened by the prospect of an agency offering "affordable" services. A key part of our plan was to sell assistive technology for hearing loss, but there was another AT retail operation with an excellent web site in our service area. Although, we planned to focus on individuals covered by Medicaid and Medicare, we hoped to attract individuals who would self-pay as well to help offset some of our costs. We had not marketed our services to that sector.

As you scan the landscape to complete your SWOT analysis, do so with a critical eye: be very honest. Seek input from your staff members, board members, customers, and stakeholders in the community. A major oversight at this level may create problems later on.

Funding. How do you find it? How much do you need? Where do you find it? Assume that you are going to have to scramble to find adequate funding; there is no pot of gold at the end of the rainbow. Look for grants. Seek out partnerships or collaborative arrangements. One thing that is extremely important is that business plan. More and more funding sources are requiring that not for profits function like businesses. Develop a budget that is adequate for the costs you anticipate, and then add more. A significant number of businesses fail because they are underfunded at the beginning. You need a cushion for situations like delays in reimbursement and unforeseen equipment and software needs.

So, how do you get started when you have little or no experience with business practices? There are a number of excellent resources out there. Your local college or community college is a great place to start. Look for special programs for not for profits where you can improve your grant writing, strategic planning, marketing or public relations skills. Small Business Administration programs can help you develop a business plan and budget. Many community colleges have programs for people who are retired where you can learn from seniors who have “been there.” They are also great sources for finding volunteers. SCORE, the Service Corps of Retired Executives, is another excellent resource as are Chambers of Commerce.

Professional organizations such as the American Academy of Audiologists can help you identify consultants to help with a wide variety of things from identifying equipment to helping you network with local practitioners. Equipment vendors are often willing to collaborate to make your programs successful. Don’t forget PEPNet, where resources include a handbook on how to use the Commission on Accreditation of Rehabilitation Facilities (CARF) certification standards to strengthen the quality and accessibility of your program. They also offer online classes for staff development.

Opening our hearing clinic has allowed us to fulfill our promise of comprehensive vision and hearing services. It was not always easy, but the lessons we learned will serve us well in future planning. Good luck as you grow your own array of services. Please contact me at heidi.adams@pepnet.org if you have any questions.

Community Rehabilitation Practitioner (CRP) Online Training

April Pierson

Abstract

PEPNet-Midwest and the University of Wisconsin-Stout Vocational Rehabilitation Institute collaborated to create two online courses with the goal of increasing vocational rehabilitation professionals' abilities to provide services to individuals who are D/deaf or hard of hearing. The first course "Working with Individuals who are Deaf or Hard of Hearing" includes units on Deaf Culture and Language, Working with Sign Language Interpreters, and Assistive Listening Devices. "Vocational Services for Individuals who are Deaf or Hard of Hearing" is a more advanced course focused toward rehabilitation professionals. Units include Employment Services, Psychometric Testing, and Vocational Evaluation. Participant feedback has been overwhelmingly positive and the courses will continue to be offered at least biannually.



PEPNet-Midwest and the University of Wisconsin-Stout Vocational Rehabilitation Institute collaborated to create two online courses with the goal of increasing vocational rehabilitation professionals' abilities to provide services to individuals who are deaf or hard of hearing. The first course "Working with Individuals who are Deaf or Hard of Hearing" is introductory and focuses on communication and culture aspects. "Vocational Services for Individuals who are Deaf or Hard of Hearing" is a more advanced course recommended for participants who have some background in psychometric testing. Each course consists of three units which are based on content presented in videos by subject matter experts.

Working with Individuals who are Deaf or Hard of Hearing

The three units in this course include Deaf Culture and Language, Working with Sign Language Interpreters, and Assistive Listening Devices.

Deaf Culture and Language is presented in ASL by Doug Bahl, who is an Interpreter Training Instructor at St. Paul College. Specific topics include salient characteristics of Deaf culture, individual differences among people who are Deaf, and the various communication methods -ASL, contact sign, English, the Rochester Method, Total Communication, Manually Coded English, and Cued Speech.

Working with Sign Language Interpreters is presented by Diane Currie Richardson, who has been working with individuals who are deaf or hard of hearing for the past 35 years as a teacher,

interpreter, interpreter trainer, social worker, and an occupational communication specialist. Topics discussed include terminology, why interpreters are needed, the interpreter's code of conduct, why good signers are not a replacement for an interpreter, how to hire an interpreter, and tips on working with an interpreter.

Assistive Listening Devices is presented by Cheryl Davis, who is the Director of the Regional Resource Center on Deafness at Western Oregon University. Dr. Davis discusses the impact of hearing loss on access to oral/aural communication, hearing aids and cochlear implants, transmitter and receiver systems (personal amplifiers, FM, induction, infrared), listening options (headphones, neck loops, etc.), and ALD peripherals.

Vocational Services for Individuals who are Deaf or Hard of Hearing

This course includes three units focused on providing vocational rehabilitation or assessment services to individuals who are d/Deaf or hard of hearing: Employment Services, Psychometric Testing, and Vocational Evaluation.

Employment Services is presented in ASL by Elise Knopf, the director of PEPNet-Midwest. Previously, she served as program coordinator for the Minnesota Employment Center for people who are deaf and hard of hearing in St. Paul. Specific topics include job seeking skills, employment training, vocational placement, occupational communication specialists, supported employment, accessibility, and common acronyms/vocabulary.

Psychometric Testing is presented by Kathleen Deery, who is an Associate Professor in the Department of Rehabilitation and Counseling at the University of Wisconsin-Stout. Dr. Deery received her master's degree from Gallaudet University, conducted research at a NIDRR funded Research and Training Center on Traditionally Underserved Persons who are Deaf, performed psychological and neuropsychological assessments of individuals with disabilities, and served as a state vocational rehabilitation counselor specializing in services to people who are deaf and deaf-blind. Topics include testing basics; pre-test preparation (with participant and interpreter); concerns during the testing process, including use of interpreters; tests commonly used with people who are Deaf or hard of hearing; and what occurs after testing is completed.

Vocational Evaluation is presented by Michelle Hamilton, who is an Associate Professor and the Graduate Program Director of the Department of Rehabilitation and Counseling at the University of Wisconsin-Stout. Dr. Hamilton is also the Vocational Evaluation and Career Assessment Professionals (VECAP) standards coordinator and representative to the Commission on Certification of Work Adjustment and Vocational Assessment Professionals (CCWAVES). Topics in this presentation include background on vocational evaluation, lab-based vs. situational vs. community assessments for people who are Deaf or hard of hearing, interest assessment, and specific tips for evaluating this population.

Who Should Take the Courses?

The courses are primarily aimed toward vocational rehabilitation professionals, but individuals from many other fields may be interested, particularly in the first course "Working with Individuals who are Deaf or Hard of Hearing." There have been many interpreters who took the first course and have found it beneficial. Assistive/rehabilitation technologists would particularly benefit from the course since a focus is on assistive listening devices. Medical professionals such as occupational and physical therapists as well as nurses would benefit from additional knowledge on Deaf culture and nearly anyone who works with individuals who use interpreters would benefit from the specific unit on that topic. In addition, regular and special educators and university disability services advisors would find the course content relevant.

The course "Vocational Services for Individuals who are Deaf or Hard of Hearing" is most applicable to vocational rehabilitation practitioners such as public and private rehabilitation counselors and vocational evaluators. This course could also be helpful for interpreters, particularly those employed in rehabilitation agencies. Parent-advocates may find it beneficial to learn about the range of services available to their children who are deaf or hard of hearing. Activities in the courses can be tailored to individual situations to result in relevancy for learners from different backgrounds.

What is Involved?

The courses are offered entirely online through the Desire to Learn (D2L) course management system. Each unit consists of a pre-test; an introduction; the content, which is presented in video format; a post-test; and activities. Many of the activities involve researching different topics and reporting on them or applying material learned in the content to their job or a case study. Responses to assignments are often posted on a discussion board, which allows participants to read and respond to each others' messages. This interaction is actually a requirement of the course to allow participants to learn from each other.

All activities and content are "asynchronous" so participants can work on the course whenever it is convenient for them, as long as they complete by the due dates. The first unit is due two weeks after the course starts with one unit due weekly after that. Having due dates helps keep participants on track since time management can be a problem with online learning. Some flexibility is allowed when necessary. Each course is offered over a five-week period of time. They have typically been offered sequentially with a week in between, each spring and fall. The courses will likely continue to be offered biannually until registration starts to decrease.

The courses are professional development and offered for continuing education units (CEUs). They are pre-approved for Certified Rehabilitation Counselors (CRC) and RID/NAD certificants can receive pre-approval for them through PINRA. Each course takes participants approximately 10 hours to complete. Participants receive 10 clock hours CEU. Two of the 10 hours are pre-approved for CRC ethics credits.

What Kind of Support is Available?

These courses feature a course facilitator who facilitates the process of learning online. The role of the facilitator is to monitor this process and intervene as necessary to provide encouragement, clarity, or redirection. Currently Heidi Adams from PEPNet-Midwest is our primary facilitator.

In addition to the facilitator, participants will get to know the training coordinator at UWStout, April Pierson. The training coordinator is the first person of contact and ensures that participants are able to access the course adequately. The facilitator is the primary contact person during the course, but the training coordinator monitors the course, adds comments and feedback occasionally, and incorporates feedback from each offering of the course to improve it for the next time.

Feedback

Feedback on the courses has been very positive. Following are comments from participants who have taken these courses:

Participant 1: This was a great course. When I signed up for it, I was wondering if I should be... because I work with the Deaf and Hard of Hearing every day and have for many

years. I was hoping I would learn some new things and wow did I ever! I really enjoyed all of the sections.

Participant 2: I so empathize with everyone who expressed a concern about an 'on-line' course. I am technologically challenged, but found it fairly easy to navigate.

Participant 3: This has been an interesting and workable method of learning, and the discussion comments changed the online option to a more social one. Yes, very good information and presented in a nice variety. I'd definitely recommend it, and already have three other interpreters who are interested in the course.

Participant 4: Coming into the course I thought I had a fairly good understanding of working with individuals who are Deaf or hard of hearing. I must say, I really did learn a lot. I enjoyed the video presentations.

Participant 5: I enjoyed this course very much. I learned a lot of information that I believe will assist me in more effectively serving my customers who are Deaf and/or Hard of Hearing. I feel much more organized in information that I can present as available options.

Participant 6: I have absolutely enjoyed this course. I found the information and activities very beneficial. I would recommend this class to anyone who works with Deaf/HOH at any capacity. I found the PowerPoint very useful and the transcripts as reinforcement for each lesson. I would be very interested in any other courses available through this medium.

Model State Plan for Vocational Rehabilitation Services to Persons who are Deaf, Deaf-Blind, Hard of Hearing, or Late Deafened

Douglas Watson, Tammy Adams, Terrye Fish, Rubin Latz, & Steve Boone

Abstract

Since the early 70's, the field of deafness rehabilitation has benefited from a series of five editions of a "Model State Plan for Services to Persons who are Deaf or Hard of Hearing." These documents have laid the foundation for quality service delivery across the United States by presenting guidelines on how to initiate and provide services to deaf and hard of hearing persons. Unfortunately, the last Model State Plan was developed over ten years ago. Since that time, there have been many changes in the nation's rehabilitation services legislation, models of service delivery, and the needs of persons who are deaf or hard of hearing. In light of these changes, there is urgent need to develop a new Model State Plan Document to Guide Rehabilitation Services for Persons with Hearing Loss (MSP). This need has been endorsed by the Council of State Administrators of Vocational Rehabilitation (CSAVR) Subcommittee on Deafness as a key goal, leading to a fifth edition of the MSP which will be available for dissemination in 2008.



Douglas Watson: Welcome to our panel program. We will be talking about the new Model State Plan (MSP) for improving services for people who are deaf, deaf-blind, hard of hearing or late deafened. We have a panel of five of the 14 co-authors who will talk about ways you can use the guidelines presented by this new publication that just came out April 1, 2008.

This is not an April fool's joke! It is the real thing! We will talk about how you can get a free copy of the publication. You can download a free copy or purchase a print copy at a nominal cost from Lulu at <http://www.lulu.com/content/2289052>.

I am Douglas Watson from the University of Arkansas Rehabilitation Research & Training Center for Persons who are Deaf or Hard of Hearing. I have served as director of the Center since 1982.

We have a team of people who will talk about the MSP. Steve Boone is also with the University of Arkansas. We have three other panelists who serve as State Coordinators for Vocational Rehabilitation (VR) Services for Deaf and Hard of Hearing People in their states. These include Tammy Adams, SCD from Alabama, Terrye Fish, SCD from North Carolina, and Rubin Latz, SCD from Minnesota. We are representing a team of 14 professionals who helped develop and write the publication we are talking about.

Our agenda today is not to simply read a document that you can read for yourself. It is to share with you the significance of the document and how you can apply it to your home state, particularly in working with the state VR agency and postsecondary educational programs in your home state. This book has a lot of relevance for collaborative planning and implementation of training and higher education in the states.

We want to present an overview of ways and means that higher education and state VR agencies can utilize the guidelines presented by the MSP to collaboratively conduct strategic planning and program development for students who are deaf or hard of hearing. We need each other as partners in order to better plan and provide the best career education and training possible.

After receiving my doctorate in 1972, I was fortunate that my first job was at the New York University (NYU) Deafness Center. The first three editions of the Model State Plan were published by our team at NYU in 1973, 1978, and 1980. The University of Arkansas later did an update of the MSP in 1990. This 2008 edition by the University of Arkansas represents the fifth edition of the MSP publication.

Take a moment to reflect back on some major changes that took place in the United States during 1973. Those of you in the fields of deaf education and rehabilitation know that year is when the Rehabilitation Act of 1973 was adopted by this country. This milestone legislation had a profound impact on the nature and direction of deafness rehabilitation in the United States. New York University, in collaboration with key Deaf community and state vocational rehabilitation leaders of that time, worked with the Council of State Administrators of Vocational Rehabilitation (CSAVR) to create the first Model State Plan (Schein, 1973). The MSP presented a set of recommended guidelines for ways and means that state VR programs might improve their ability to effectively serve persons who were deaf or hard of hearing. The MSP didn't issue mandates, but instead encourages and recommends ways of achieving the goal of better serving people who are deaf.

Two more revisions followed in 1978 and 1980. Then, the enactment of the Americans with Disabilities Act (ADA) in 1990 further changed the way we did business.

Additional developments over the years have led to calls for updates and revisions to the Model State Plan. The 2008 edition of the MSP is the most recent effort to update the guidelines and keep them current to the issues and needs of 2008.

In addition, the University of Arkansas also sponsored two editions of a parallel set of MSP guidelines for serving the deaf-blind population. Over the years, after starting in 1973 with the focus on serving “Deaf consumers,” the MSP has added hard of hearing, deaf-blind, and now late deafened consumers to the core target population. We encourage state VR agencies to recognize and address the specific needs of all four of these groups.

For the 2008 edition of the MSP, our goal was to revise and update the publication to include contemporary issues and challenges. Our target audience is broadly defined as all persons who have significant hearing loss. It is addressed to any program that is providing direct services to people who are deaf or hard of hearing.

The MSP does not go into great depth regarding related education and mental health issues. That is not our focus. Instead, the document focuses on talking to state VR agencies and their partners. State VR agencies, in turn, are responsible for articulating their agency goals to partner programs within the state.

The writing teams represented people from several states [on overhead]. It is a mixed group of university personnel and representatives from key state VR programs and tasks forces within the national VR community.

The 2008 edition of the MSP was released April 1. Next week, the MSP team will present the revised edition at a national conference of all state VR directors. We will release this report at the CSAVR spring conference to officially present this report to the federal/state VR program.

I would like to ask Dr. Boone to come up and we will begin the overview of the 2008 MSP.

Steve Boone: This is the second Model State Plan program I have helped with. It is an exciting document to work on because of the leadership of people involved in it. The list of co-authors took the lead on developing each chapter and, as needed, requested information and support from other knowledgeable professionals. This writing process is parallel to the one that was previously used.

The current MSP has nine chapters. We will go briefly overview these chapters in today's presentation. The document starts with a number of guiding principles that were used to guide the development of the MSP.

Today I was asked to describe the information that is included in the initial chapter that focuses on the demography of hearing loss. The initial section presents an overview of the population of people with hearing loss. This population includes with persons with diverse needs who use different communication styles and preferences. They vary in terms of additional problems they have in getting rehabilitation services. Demography of the population is based upon three key facts.

- More than one in every ten Americans has a hearing loss (30.6 million among 300 million).
- About 18 million of these persons are of working age (16 to 64 years old).
- About 414,300 are in postsecondary education.

The second section of this chapter talks about VR's response to serving these persons. Vocational Rehabilitation identifies seven different groups of people with hearing loss.

- 03 Deafness, Primary Communication Visual
- 04 Deafness, Primary Communication Auditory
- 05 Hearing Loss, Primary Communication Visual
- 06 Hearing Loss, Primary Communication Auditory
- 07 Other Hearing Impairments (Tinnitus, Meniere's Disease, Hyperacusis, etc)
- 08 Deaf-Blind
- 09 Communicative Impairments (expressive/receptive)

The goal of VR is to help people get employment. If you look at all persons served and cases served in 2006, there were around 600,000 cases closed. Of those people, there were 38,000 with hearing loss. This is the largest category of people served in the U.S. Those numbers would go up if we coded them with a secondary disability and some type of hearing loss.

The success of VR meeting employment goals for those served is evident. Over 63 percent of those with hearing loss achieved a successful employment outcome, as compared to 31.4 percent of persons with all other impairments.

Since we are at a postsecondary conference, I thought it would be helpful to talk about the number of students that have some sort of hearing loss. These are based on 2004 numbers and may be an underestimate. There are almost 400,000—and we think nearly 500,000—people are in educational

settings with all kinds of hearing loss.

The final section of this chapter describes future population issues that may impact people who are served by VR as well as those that end up postsecondary settings as a function of getting served through VR. The last census was around 300 million people. Approximately one in every 10 people has a slight hearing loss. This is also probably an underestimate.

As the US population ages, the number of persons with hearing loss will increase. At this point in time, the Baby Boom generation is getting older. As you begin to age, you experience some hearing loss. You may have experienced that yourself. So the number of people with hearing loss is going up at this time. That means people who end up VR's case load will likely be a slightly older population, statistically. There will also be more people who consider themselves late deafened.

We also know persons from racial-ethnic minority groups have increased by about one-third in the US population. We can expect VR and postsecondary institutions to be serving more of these people.

Most recent estimates of deaf-blindness find that population is growing. This is especially evident if you consider those who are losing their vision or hearing because of aging. In 2007, it was said that roughly 250,000 people can be considered deaf-blind. I suspect that is, again, an underestimate. We will see more people with multiple problems.

There have been many workshops regarding needs of persons who are deaf and lower functioning or at risk. That population is also growing. Another group that you will see being served in larger numbers in VR in education will be people with more significant disabilities. Finally, another group that has a policy change in the way people walk into our agencies is related to early identification. We have laws that mandate children are screened at birth. Theoretically, they have some sort of treatment plan in place if they are detected with a hearing loss. Hopefully we will see kids get some form of communication intervention early on. That may be a function of getting amplification or some other medical intervention, such as a cochlear implant. It could include getting sign language stimulation or being placed in an oral program. We hope they have better communication than they have at this time because of early identification.

Tammy Adams: When talking about the vocational rehabilitation process, it is important to know that there are 80 VR agencies in the country. Some states have a general VR program and a blind VR program, while other states have a combined agency program. Alabama has a combined agency, and North Carolina is an example of a state with both a general VR program and a blind program. Some states have order of selection, but other states are not in order of selection. Because of the law, there are things we all have to do the same way; however, there are a lot of variations in how states provide VR services.

The VR process is a process by which the counselor, through a series of decisions and actions, moves the consumer toward a successful employment outcome. The counselor is the person who ultimately is responsible for the direction of the program.

The definition of eligibility is an applicant must have a physical or mental impairment that is a substantial impediment to employment, requires VR services to become employed, and can benefit from these VR services in terms of an employment outcome. No matter where you are or what state you are in, employment is the goal of VR.

The individualized plan for employment (IPE) is mandated for each consumer. Services are

outlined in each IPE. It is individualized and based on that consumer's needs. The consumer and counselor are to agree on employment outcome. VR is about employment. In some cases, postsecondary training may be necessary to achieve the employment goal. We often have to remind consumers and counselors that postsecondary training is not the goal, but a means to the ultimate goal of employment.

That has to be outlined in the IPE. That process is very important to communicate with the counselor and the consumer. You, as postsecondary representative in the process, need to understand what the IPE says, and what the consumer and counselor have agreed upon.

This chapter also addresses how to understand how diverse our consumers are. Their needs, communication preferences, and backgrounds are discussed. We try to identify and understand their needs and their functional issues. It outlines the services VR can provide to address the barriers to employment.

Vocational rehabilitation agencies provide core services and support services. Core services include things like counseling and guidance; assistive technology such as hearing aids; and job placement and follow up. Support services may include interpreter services, tutoring, and tuition. How these services are provided is different in each state. I would love to stand before you and say that all VR programs follow the same procedures, but I can't.

It's difficult to explain in a few minutes this whole chapter on the VR process. It's so detailed and so different for each agency. If you get this document and read it, it will give you a strong framework of what VR is and what the process is supposed to be for all agencies.

Moving on, Chapter 3 addresses personnel development standards. This chapter outlines recommendations to VR agencies and administration as to what staff we believe each state agency should have to provide strong leadership and quality services for D/HOH, late deafened, and deaf-blind in their state. We recommend each state start with an administrative position as coordinator for D/HOH services. Who has a SCD in their state? How many were unaware of an SCD in your state?

If you have a state coordinator for the deaf in your state and you have a strong relationship with them, they can be your best advocate. That is true in states where there is a strong relationship with VR and postsecondary institutions.

This chapter also outlines the knowledge, skills and abilities for VR personnel serving this population. It describes what their skills are and how you can work better with them.

Terrye Fish: I will talk about Chapter 4: Transition Services. That is a passion for me.

Providing transition services involves working with high school students who are deaf, deaf-blind, or hard of hearing. This is secondary education. We have two laws: the Individuals with Disabilities Education Act (IDEA), and the 1990 Amendments of the Rehabilitation Act which emphasizes collaboration and working together to serve students in high school with a disability.

Because of these laws, we recognize several keys to success—one is to make sure that parents and teachers are knowledgeable about adult services, and that they understand that secondary education is an entitlement program; most adult program have eligibility guidelines. This is very different for parents and teachers. Because of these two laws, we do joint planning. The ITP is the Individualized Transition Plan. The IEP is the Individualized Education Plan. The IPE is the

Individualized Plan for Employment.

So you may want to know the different plans so you are not duplicating services. When we work as a team, the student receives great services and tends to be more successful. It is good to have parents involved when you have transition team meetings. The team meetings should include all personnel working with the student at school and in the community. It is important to stress the importance of having both the student and the parent at the table.

This is a definition of transition services. [on overhead].

In the first paragraph, it talks about employment. That is why VR is at the table. Vocational rehabilitation makes sure to provide services for students while they are in high school, if it is related to employment. Everything VR does must be related to employment. I will repeat that. Tammy talked about this earlier because so many people associate VR only with postsecondary training.

Our goal is employment. We get calls about VR paying for training. Is it related to a goal? Is it something you need to go to work? If you are employed and it is professional development, VR may not be able to sponsor the training.

Next are the student's preferences and interests, and what they need to reach a vocational goal. This is outlined on the IPE.

Audience Member: Kids in high school often don't know their goals for the future. When they get to college, they know more. How do you deal with that?

Terrye Fish: In IPE, the first letter stands for "individualized." The plan can be amended if the student changes his/her mind. We serve a lot of students who attend college. Most students enter college with one major in mind, then the student may or may not change his/her mind. Then students call their counselors and tell them they have changed their mind. We amend the individualized plan for employment. It is important to note that the postsecondary training must be related to the vocational goal on the IPE.

We understand students will change their minds. It is normal. The key thing is communication. The consumer needs to communicate with their counselor, letting them know that they have changed their mind and why. The counselor then makes sure the change meets their skill level.

Some things postsecondary institutions can do to foster collaboration with the high schools may be information sessions about VR services, in-service training with the high schools teachers, and transition fairs.

It would be good if colleges could go to the high schools with a high population of students with hearing loss so they can talk about their services and how to get ready for transitioning to college. It would also be helpful to have information meetings with parents and teachers.

Yesterday, we talked about how itinerant teachers who work with students with hearing loss need training. In the summer, it would be great to have in-service trainings for teachers who work with students who are deaf and hard of hearing to educate them on financial aid (that form is unbelievable!). So training with the teachers can help the students.

In North Carolina, we have students attending public schools and taking college courses while in

high school. If the postsecondary staff could be involved in the IEP meetings, they could assist the teachers and parents to help the students with the transition from high school to college.

One of the goals for being present on the high school campus will help students recognize the value of postsecondary education and lifelong learning. When they see people, especially deaf people (if you can bring deaf people to the high school) who have graduated from your institution and have them talk about their experiences, it will make a big difference.

This is just a short summary of Transition Services. Now I will go into Chapter 5 which talks about communication access. This section is powerful in that under the law; it states that VR must provide communication access in the person's preferred mode of communication.

When a consumer contacts VR, the counselor has to quickly determine what the preferred mode of communication is by asking the consumer. When the consumer goes for a psychological evaluation, to on-the-job training, or to orientation, VR has to provide that mode of communication. It could be an American Sign Language interpreter, a computer-assisted notetaker, or an assistive listening device. For example, if a deaf student wants sign language interpreting, then the interpreter is hired by VR. When the consumer has an interview, VR provides an interpreter.

If VR contracts with a provider outside of their agency, it is important to make sure they can provide the appropriate mode of communication for that consumer. Some states operate differently than others. Rubin will give you examples of how we do things differently from state to state when he talks about the Memorandum of Agreements.

We have a lot of service providers that we work with in North Carolina. We provide them with a list of interpreters, cued speech transliterators, and captionists.. We don't share the rates with them because service providers can negotiate a different rate with other private companies.

The last chapter I will summarize is Chapter 6 which talks about technology and accommodation. This section provides a list of assistive technology and accommodations for people who have hearing loss. It gives you a whole list of different kinds of accommodations that are available.

One thing to remember is "One size doesn't fit all!" In the college system, it's easy to get used to providing interpreting services so some people think those services should be provided for every student that comes through the door. I get phone calls from different colleges who have hard of hearing students who don't know sign language. I encourage them to ask the student what accommodation is most appropriate. This chapter also provides information about other possibilities or options.

Technology is a wonderful thing. If you are trying to decide on the best technology for a consumer, VR has resources. Most states have assistive technology programs at no cost for the consultation. Vocational rehabilitation may also have rehabilitation engineers who can assess the situation and make recommendations or provide ideas; the college or university or company would have to pay to have the equipment installed.

I am now going to turn it over to Rubin. We will have time for questions at the end.

Rubin Latz: We have a lot of ground to cover still. My assignment is to talk about Chapter 7 and Chapter 9. I need to introduce myself as "Mr. Compare and Contrast." Minnesota operates differently than Alabama and differently than North Carolina. I will touch on some things that have

already been talked about.

It is interesting timing. This discussion is about state rights, within a federal program. In Minnesota we operate on about 80% federal dollars and 20% state dollars. I'm reading a historical novel called *Scandal Monger* by William Safire. It is a fascinating story about the early presidents, and about federalism, states' rights, and federal government rights.

Minnesota Vocational Rehabilitation spending is heavy on education and light on medical restoration. Minnesota VR wouldn't touch providing interpreting services at a medical appointment. We have another agency that does that. We spend approximately \$3.5 million each year on postsecondary training. Postsecondary is the "meat" of what I will talk to you about in Chapter 7. We are similar to Oklahoma in that we as an agency leave financial responsibility for auxiliary aids and services for effective communication with the postsecondary institutions

Terrye mentioned the involvement of parents in planning. In Minnesota, we have transition services handled by a staff colleague who is a statewide transition specialist. I will get back to that if there is time!

When you get to the Model State Plan document, you will see there it is approximately 130 pages. You can come up and look at it later if you want. We will hang around for questions and answers.

The interagency agreements come in many shapes and forms. In Minnesota, we have Memoranda of Understanding (MOU). We have operating agreements with community rehabilitation providers that spell out expectations for access for things like communication, etc. The Commission on Accreditation of Rehabilitation Facilities (CARF) standards are applied in these agreements on behalf of consumers.

We have memoranda of understanding with the Department of Human Services. We have an MOU with the Minnesota Association of Financial Aid Administrators. We have all kinds of agreements that we operate with that serve different purposes.

I want to talk about survival because of the way we are funded. Many states have seen flat funding for VR. As populations [indistinguishable] and demand for services grow, federal funding has remained flat. Flat funding is an issue. In many states, we can't continue to operate without additional funding. If you are new to VR, the funding formula set by Congress is tied to population, size, and state income.

Minnesota has done well in terms of individual income. Various factors, including labor market changes, housing issues, etc., can impact funding. Order of selection was mentioned. We had about 6,000 people waiting for services at one point. That is no longer the case. But what you see in your state, the quality of services, and relationship with VR staff can be influenced by things we don't think of and things that are out of our control.

Survival and agreements go hand in hand. Without the agreements, we are out there doing our own thing. Sometimes offices and institutions don't talk to each other. So establishing connections and relationships, and revisiting your interagency agreements with institutions of higher education is critical to survival.

Financial and other items are out of our control, and that impacts how well we perform in collaboration. In an effort to enhance services, we like to think collaboration means we do better. How many of you have regular communication with a VR counselor in your state or the state

coordinator? Maybe some of you are not aware of the points of connection or who these people are. Ideally, we know each other. We know the services. On the item of services, Minnesota would not purchase and provide equipment to DSS staff. We may fund a person (a VR consumer) in your school or we may provide hearing aids and/or other assistive listening devices, but funding the equipment onsite instead of the school providing reasonable accommodations on campus is another thing.

I will touch on one of these—spelling out partners' roles, responsibilities, and functions. We will talk about the interagency agreement with postsecondary institutions. Minnesota's agreement is 8-9 pages long. The Rehabilitation Amendment of 1998 mandated this. In Minnesota, we are separate from blind services. We don't do deaf-blind. We have a separate agency with that responsibility, Minnesota State Services for the Blind (SSB).

We had a representative from the Minnesota State College and University System on our interagency agreement work group, along with the University of Minnesota, the private colleges, and State Services for the Blind. There are more than 30 technical and community colleges. We put the operation under one umbrella. It's different in other states.

Male Speaker: For example, California has 108 community colleges, 19 state universities, and 12 California state system colleges.

Rubin Latz: So the point is with the agreement, we know who does what. Dispute resolution is a big emphasis. Each agreement must have and identify the dispute resolution mechanism. So we have an identified mechanism to get together and talk about it when there is a dispute. There is collaboration. The point of protection is the important item for you, the VR agency, and the consumers we serve.

Another thing you are probably acquainted with is the Americans with Disabilities Act (ADA) and responsibilities for postsecondary institutions serving students who are deaf and hard of hearing.

Former RSA commissioner Fred Schroeder made a contribution to this document. How we came to the agreement and how it is supposed to work.

One final point about Minnesota's interagency agreement is that there are private colleges and universities who were not co-signers. They were part of the process, but they chose not to sign the document. It is a sore spot. We don't send as many students to private colleges. It is about money, planning, and keeping the agency alive. Yet we value postsecondary training. We spend about \$3 million each year on postsecondary education.

I need to jump ahead to Chapter 9. This is the closing chapter. This is where we talk about future directions. Where do we want to be and how do we get there? It is about taking a look at what we have, what we do, and how to do it better. The basis for Chapter 9 is that each state is responsible for reviewing and assessing what its services look like.

Four or five years ago, California Vocational Rehabilitation made an investment to do a large scale assessment VR services for people who are D/HOH. Minnesota Vocational Rehabilitation is now undertaking our effort. We look at geographic patterns and money spent, staffing, etc.

In Minnesota we have 18 rehabilitation counselors for the deaf. Of that group 6 are competent signers and 2 are deaf. Our assessment is to identify the weaknesses. We will make recommendations for improvement for the 2009 legislative session. Recommendations hopefully

will result in additional legislative funding.

Douglas Watson: This will be presented to the full membership of the national vocational rehabilitation meeting in Maryland. The executive committee for CSAVR has endorsed this plan. It will become approved next week.

I would like to emphasize here that state agencies will receive this publication and determine where they stand and what they want to do; people who advocate for individuals who are deaf and hard of hearing need to be aware that they are important players. Be aware that your state agencies will be thinking about what they will do with the revised Model State Plan and how each state will respond. How will they take on different chapters about what they will do?

Postsecondary education/training and representatives from all of these consumer groups need to be heard. The opportunity is here. States are not mandated to adopt this unless the public and the consumers say they want to see the state's response to this. What is your state plan and how does it apply to postsecondary education and training?

I will open the floor to questions. I invite you to comment or ask questions.

Male Speaker: I am deaf and as a consumer, I would say I am a grassroots consumer. I was on an advisory council for assistive technology. I was surprised at what I learned. They said there was an increase in the number of people that had autism. That was a surprise to me. I was surprised because I knew it related to people with a hearing loss but there was a rise with those with autism. I wonder how we in VR would face those types.

Rubin Latz: Thanks for the question. Minnesota doesn't have an autism specialist but we do have specialists for consumers who are deaf or hard of hearing, those with traumatic brain injury, and those with mental health issues. I and others do not have the expertise in autism. I know that transition is an emphasis with federal government. In Minnesota we focus around that in general.

Another emerging population we will see is returning combat veterans. In addition to orthopedic injuries, frequent blast injuries also causing hearing loss. It's estimated that over 60% of combat veterans are coming home with a hearing loss. We have a lot to do in VR, and you in postsecondary will have an increased workload. Our jobs will be different with that population and we need to prepare for that.

Terrye Fish: Doug, I want to respond to that question. In North Carolina, we have been serving people who have autism for many, many, many, many years. In Chapel Hill, we have a Division TEACCH (Treatment and Education of Autistic and related Communication-handicapped CHildren) at the University of North Carolina in Chapel Hill. They have a huge program for children and adults who have autism.

If a counselor for the deaf has somebody that has been diagnosed with autism, they collaborate with Division TEACCH. "TEACCH is an evidence-based service, training, and research program for individuals of all ages and skill levels with autism spectrum disorders. TEACCH provides clinical services such as diagnostic evaluations, parent training, and parent support groups, social play and recreation groups, individual counseling for higher-functioning clients, and supported employment" (Division TEACCH website, 2006). They also provide consultation to parents and professionals across the country. If you have somebody with autism, you can contact them. <http://www.teacch.com/> It's a wonderful resource.

Female Speaker: I'm from Hawaii, so aloha! I have two brief questions. I am fascinated with the interagency agreements. I don't know if we have any in Hawaii, but I wonder if we can get samples of existing interagency agreements that we can take a look at.

Douglas Watson: Yes, in the book there are samples.

Rubin Latz: You can also find a white paper on www.csavt.org that was done by our colleagues in Wisconsin Vocational Rehabilitation. There are some samples in that.

Female Speaker: I have another quick question. It is not related but somebody mentioned about fees for interpreters. In Hawaii we have published VR rates for interpreters. I wonder if that is standard or if it is a Hawaii thing that we publish their rates.


Terrye Fish: The rates are not set by the interpreters but they are set by the VR agency. We were told that we could only share within our agency and department but not outside state government. The interpreters are entitled to set their own rates when working with private companies.

In North Carolina, we are different from Minnesota in that the agreement specifically states that VR will help pay for interpreting services based on the interpreter's certification or license to the colleges and universities. The authorization for services is issued to the college or university and not to the interpreters. It is the college or university's responsibility to hire the interpreter, arrange the class schedule, and pay the interpreter. Vocational Rehabilitations will reimburse the college or university for some of the cost of interpreting services at the end of the semester or quarter.

Male Speaker: I have one last question. I am from California and my name is Rodney Nunn. I'm the acting program manager in California for Deaf/Hard of Hearing services. I want to thank all of you on this committee that have developed this and given it to us for free.

Douglas Watson: You are welcome; please do encourage others to contact www.Lulu.com to download a free copy.

Thank you. I'm sorry time expired. Go back home and advocate.



The Model State Plan for Improving VR Services to Persons with Hearing Loss


Douglas Watson - AR
Steven Boone - AR
Rubin Latz - MN
Tammy Adams - AL
Terrye Fish - NC

PEPNET National Conference
April, 2008
Columbus, OH

MODEL STATE PLAN: Legal Basis

Title I, Part A, Section 101(a)(1) of the
Rehabilitation Act of 1973 states:

*To be able to participate in programs under this
title, a State shall submit to the
Commissioner a State Plan for vocational
rehabilitation services.*



Model State Plan For VR Services to Deaf

CSAVR & NYU	1973, 1977, 1980
UA & D-B Task Force	1983
CSAVR & UA	1990
UA & D-B Task Force	1993

2006: CSAVR & UA


Goal:
To revise and update a published resource to address
contemporary issues related to federal-state VR service
provisions to individuals who are deaf, deaf-blind, hard of
hearing or late deafened

Audience:
State VR administrators and direct service staff, community
based rehabilitation program and related human service
personnel, K-12 and postsecondary education personnel, and
individuals with hearing loss and their families

MSP Team Members

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Model State Plan for
Vocational Rehabilitation
Services to Persons who
are Deaf, Deaf-Blind,
Hard of Hearing,
or Late Deafened
2008

Edited by
Douglas Watson, Thomas Jennings, Patricia Tomlinson,
Steven Boone & Glenn Anderson

Today's Agenda

Overview the 2008 MSP and VR Issues for this population

Encourage collaboration with your state VR agency and other key players to assure that your state plan is:

- current and
- utilizes "best practices" in planning and delivery of postsecondary training and education for individuals with hearing loss

2008 Table of Contents

Preface	
Guiding Principles	
Acronyms	
Chapter 1:	People with Hearing Loss
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Chapter 8:	Independent Living Skills
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References	

Chapter 1: People with Hearing Loss

- Overview of the size and distribution of the US population of persons with hearing loss
- Needs of six key population groups are described:
 - Persons who are Deaf
 - Persons who are Deaf-Blind
 - Persons who are Hard of Hearing
 - Persons with Adult Onset of Hearing Loss (Late-Deafened)
 - Persons who are Members of Racial or Ethnic Minority Groups
 - Persons who are Labeled as "Low Functioning or At-Risk"
- Statistics regarding successful federal-state VR outcomes for individuals with hearing loss from 1960 to 2008

Some Demography

- The Population
- Those served (and closed) by VR
- Those who need and benefit from Postsecondary Education & Training

The Population

- More than one in every ten Americans have a hearing loss. (30.6 million among 300 million)
- About 18 million of these persons are of working age (16 to 64 years old)
- About 414,300 are in postsecondary education or training programs

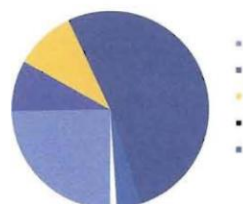
Seven Groups Served by VR

- 03 Deafness, Primary Communication Visual
- 04 Deafness, Primary Communication Auditory
- 05 Hearing Loss, Primary Communication Visual
- 06 Hearing Loss, Primary Communication Auditory
- 07 Other Hearing Impairments (Tinnitus, Meniere's Disease, Hyperacusis, etc)
- 08 Deaf-Blind
- 09 Communicative Impairments (expressive/receptive)

Those served by VR

FY 2006	All Other Impairments	All Hearing Loss
All Closures	579,145	38,004
Employment Outcome	181,703	24,088
Percent with Successful Outcome	31.4%	63.4%

FY 2006



Students with Hearing Loss, 2004

Age	Number
18-19	108,700
20-21	71,200
22-24	59,900
25-29	45,000
30-34	30,000
35+	99,500
Total	414,300

Emerging Population Issues

250,000 Deaf-Blind people in USA

New demographic studies report that, including individuals 55 and over who are experiencing age related vision and hearing loss, there are more than 250,000 people in the US who would be considered deaf-blind and eligible for HRVVC's services (May, 2007)

U.S. minority population tops 100 million

The number of people in the United States from ethnic or racial minorities has risen to more than 100 million, or around one third of the population, according to a U.S. Census Bureau report on msnbc (May 18, 2007)

Value Added to Household Income by Hearing Aids: \$23,000 - \$10,000

Untreated hearing loss shown to negatively affect household income, on-average, by nearly \$23,000 per year depending on the degree of hearing loss. But the use of hearing aids mitigated the effects of hearing loss on income by about 50% loss, 2,000 with hearing aids, and nearly 40,000 with normal hearing. (Better Hearing Institute press release, 540, 668-7665)

Chapter 2: The Vocational Rehabilitation Process

Definition:

A process by which the Counselor and consumer, through a series of decisions and actions moves the consumer toward a successful employment outcome.

Eligibility:

An applicant must have a physical or mental impairment that is a substantial impediment to employment, requires VR services to become employed and can benefit from these VR services in terms of an employment outcome.

Chapter 2: The Vocational Rehabilitation Process

Topics addressed:

Referral development activities
Assessment for determining eligibility & service needs
Individual Plan for Employment (IPE)
Interagency collaboration to facilitate access to a broad range of services that help lead to successful employment outcomes
Placement, closure and follow-up
Post-employment services
Administrative policy issues

Individualized Plan for Employment

- Consistent for each state VR program is the requirement to develop an IPE for each consumer served.
- Services provided are to be outlined in the IPE and are to be based on the diverse needs of the individual with the goal of employment.

Postsecondary Training

If the consumer and the counselor agree that the employment goal requires postsecondary training then it will be included as a service in the IPE.

The goal of postsecondary training is not to get the consumer to graduate but rather to achieve the employment goal outlined in the IPE.

VR Consumers who are Deaf or Hard of Hearing are diverse in their needs, such as their communication preferences, cultural differences, and functional issues.

Each state VR agency varies in their policies on the way they support and address consumers who are Deaf or Hard of Hearing in a postsecondary institution.

SERVICES AUTHORIZED

- Interpreter services
- Tutoring
- Tuition
- Books
- Fees
- Technology
- Transportation
- Housing

Chapter 3: Personnel Development and Standards

Personnel Need Special Knowledge, Skills and Abilities

- Appropriate Professional Discipline
- Communication Competency
- Training and Experience in serving individuals with hearing loss

State VR agency should provide systematic in-service training to upgrade or maintain KSA of personnel working with consumers who have a hearing loss

PERSONNEL

- Structure of Vocational Rehabilitation agencies varies from state to state
- MSP recommends to each state have an administrative position responsible for coordination of deaf and hard of hearing services (SCD)

Resources for Postsecondary

SCD

- Provide Information on state VR structure
 - Information on VR personnel
 - Collaborative efforts on behalf of consumers
 - Training opportunities for staff

RCDs:

- Responsible for Rehabilitation Process

Chapter 4: Transition Services

IDEA and 1998 Amendments of Rehab Act of 1973: encourage joint development of an Individualized Education Program (IEP) and an Individualized Plan for Employment (IPE) prior to the student exiting high school

Keys to Success

- Education of parents & teachers about adult services
- Joint planning of ITP, IEP, and IPE
- Parental involvement
- Inclusion of other service providers in planning & conduct
- Team meetings with students & parents involved

Transition services

A coordinated set of activities

- designed within an outcome-oriented process that promotes movement from school to post-school activities, including post secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation.
- The coordinated set of services shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post school adult living objectives, and when appropriate, acquisition of daily living skills and functional evaluation.

Promote Students' Self-Determination and Self-Advocacy

- Provide opportunities for decision-making and encourage students to express their preferences and make informed choices throughout college life.
- Support students' development and use of self-advocacy skills, and teach students to develop an internal locus of control.

Ensure Access to Postsecondary Education

- Use universal design to make classrooms, curricula, and assessments more accessible for students with disabilities.
- Use instructional approaches shown to promote positive outcomes for students who are deaf, deaf-blind, hard of hearing, and late-deafened.
- Actively participate on the Transition Team.

Promote the value of preparation for and participation in postsecondary education

- Collaborate with secondary schools to provide informational sessions and in-service training to secondary school staff, students, parents, and community agency personnel.
- Provide informational meetings and on-campus experiences for parents, students with disabilities, community-based agencies, and high school staff to inform them of the programs, services, and expectations.

Promote the value of preparation for and participation in postsecondary education

- Participate in the development of the IEP when high school students with disabilities are attending the college as part of their high school program.
- Provide input and information to the IEP committee for those students who are exploring going to college.
- Assist in locating financial aid resources for eligible students.

Promote the value of preparation for and participation in postsecondary education

- Encourage all parties involved to recognize the value of postsecondary education and lifelong learning in securing, maintaining, and advancing in employment.
- Collaborate with secondary schools to provide informational sessions and in-service training to secondary school staff, students, parents, and community agency personnel.
- Provide informational meetings and on-campus experiences for parents, students with disabilities, community-based agencies, and high school staff to inform them of the programs, services, and expectations.
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Promote the value of preparation for and participation in postsecondary education

- Provide input and information to the IEP committee for those students who are exploring going to college.
- Assist in locating financial aid resources for eligible students.
- Encourage all parties involved to recognize the value of postsecondary education and lifelong learning in securing, maintaining, and advancing in employment.

Promote collaborative employer's partnerships with classroom instruction

- Obtain information from the Department of Labor and/or Employment Office about companies moving into the community and their training needs.
- Encourage employers to present in the classroom and participate in career fairs.
- Collaborate with vocational rehabilitation to establish on the job training sites in the community.

Improve collaboration and systems linkages at all levels

- Work to reduce the confusion and frustration experience by parents and families by coordinating services and streamlining access to information and programs.
- Work with community organizations serving culturally and racially diverse populations to assure that programs and services meet the needs of all students, parents, and families.
- Participate in career fairs, job fairs, transitions fairs, etc. to provide information to students who are deaf, deaf-blind, hard of hearing, and late-deafened and their families.

Improve collaboration and systems linkages at all levels

- Promote collaboration between secondary schools, postsecondary educational institutions, and vocational rehabilitation through the establishment of jointly funded positions.
- Promote access to a wider array of community services by mapping community assets and developing interagency agreements that promote and support the sharing of information and engagement in joint planning.
- Promote collaborative staff development programs.

Chapter 5: Communication Access

Recognize the diversity of language and communication preferences of persons with hearing loss

Agencies must ensure providers directly communicate in the consumers choice

Providers must be:

Knowledgeable of variety of communication alternatives

Proficient in American Sign Language

Have a sign language development plan

Agencies and their vendors must use competent interpreters, and be aware of alternative options such as Video Relay Services, Video Remote Interpreting and Certified Deaf Interpreters

Chapter 6: Technology and Accommodations

One size does not fit all.....accommodations must be tailored to the individual and the situations he/she faces

Best practices in identifying accommodations
Categories of Accommodations

Personal Listening Devices

Assistive Listening Devices

Telephone Access

Workplace, Group & Classroom Accommodation

Alerting Systems

One on one interactions

Formal business situations

Funding of accommodations

Chapter 7: Partnerships and Interagency Agreements

Interagency Agreements serve as critical linchpins for success as programs and services have become more interdependent

Rehabilitation Act of 1973, as revised in 1998, mandated that state VR programs work in collaboration with institutions of Higher Education (IHEs) to ensure access to postsecondary training and education would not devolve into a succession of turf battles

34 out of 50 states have formal Interagency Agreements between VR and IHEs – with a great deal of variability from state to state

State VR agencies are encouraged to develop similar Interagency Agreements with other key programs and services toward goal of improving service delivery to persons with hearing loss

Interagency Agreements (IAs) and Memoranda of Understanding (MOUs)

- Critical to success
- Demonstrate collaboration
- Necessary for survival
- Mechanism to thrive

Benefits of IAs & MOUs

- Enhance services
- Increase shared understanding
- Eliminate duplication
- Identify service gaps

Benefits of IAs & MOUs

- Maximize efforts to achieve successful rehabilitation outcomes
- Spell out respective partner roles, responsibilities & functions
- Protect partners AND consumers

IAs with Institutions of Higher Education (IHEs)

- Agreement with VR mandated by Workforce Investment Act ('98 amendment to The Rehabilitation Act of 1973)
- Sec. 101(a)(8)(B): "...ensure that an interagency agreement...takes effect..."
- "...shall specify agency financial responsibility; conditions, terms, and procedures of reimbursement...for resolving interagency disputes...coordination of service..."

Minnesota's IA with IHEs

- Along with Oklahoma's, became lightning rod
- Works well for our state agencies, institutions and students / consumers
- Opened channels of communication, agencies now work with greater trust

MN VR, Blind Agreement with State Colleges & Universities, U of M

- Eighteen months, representative & collegial process
- Buy-in widespread, but not complete – private colleges & universities did not sign on

U of M

- Federal Fiscal Year 2007 costs for auxiliary aids & services
 - Interpreting service hours 19,350
 - Captioning service hours 2345

Suggestions

- Find / know your state Interagency Agreement with Institutions of Higher Education
- Update key contacts / allies information
- Work your process

Chapter 8: Independent Living Skills

Independent living

- well-organized movement among people with disabilities
- to enhance self-esteem and self-determination, as well as the socio-economic resources available to choose and maintain individual, independent lifestyles.

Life skills, in addition to essential literacy and numeracy skills, could encompass the ability to build sound, harmonious relationships with self, others and the environment; the ability to act responsibly and safely; the ability to survive under a variety of conditions; and the ability to solve problems.

Chapter 8: Independent Living

- Actively participate on the transition team to provide information on assistive technology for students who are deaf, deaf – blind, hard of hearing, and late-deafened.
- Promote independent living philosophy throughout all planned activities.
- Develop independent living skills classes or experiences for students who are deaf, deaf – blind, hard of hearing, and late-deafened.

Chapter 8: Independent Living

- Provide support groups to discuss how to deal with grief (lost of a family member), progressive hearing loss, and/or assistive technology needed in the home for students who are deaf, deaf – blind, hard of hearing, and late-deafened.
- Attend IEP meetings, as invited by the student or parent/guardian, for the purpose of advocating for requested accommodations, assisting the family and student in understanding their rights and responsibilities during the IEP process, providing information on possible services and resources available, and providing any other information or assistance needed.

Chapter 8: Independent Living

- Provide up-to-date information to the Transition Team regarding the Americans with Disabilities Act and potential changes in legislation affecting people who are deaf, deaf – blind, hard of hearing, and late-deafened of any age.
- Provide assistance to all students who are deaf, deaf – blind, hard of hearing, and late-deafened and/or parents/guardians referred for independent living services by participating schools and agencies.

Chapter 9: Future Directions

- A. Assess where are we in our State?
- Analysis of RSA-911 Data
 - Analysis of current counselor assignments
 - Analysis of counselor accessibility
 - Analysis of office accessibility
 - Analysis of individual cases (targeted case reviews)
 - Analysis of policy, interpretation and practice in VR sponsorship of Postsecondary training & Education
 - Individual and group interviews and focus groups

Chapter 9: Future Directions: Where do we want to be?

B. Present Assessment Findings to Senior Management Team and Gain Feedback: Where do we want to be?


- Submit State-of-the-State Report
- Provide recommendations for program modification and follow-up
 - Discuss findings and recommendations
 - Get feedback and direction for future program and staffing structure and activities in postsecondary training & education
 - Be certain of management's commitment to the activities and structures they recommend for the follow-up strategic plan

Chapter 9: Future Directions: How do we get there?

C. Develop the Strategic Plan: How do we get there?

- Staffing Structure (or restructuring)
- Human Resource Development
- Policy, Practices, Fees, Forms
- Accessibility (communication & technology access)
- Programs to be Piloted in Postsecondary Training & Education
- Strategic Plan must be a living document
- Evaluate regularly, revise as needed, document progress, problems and NEXT STEPS

Want a copy of the MSP?



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Patchwork to Seamless

PEPNet Products for Professionals in Community Based Rehabilitation Programs

Heidi Adams




Abstract

Professionals in community based rehabilitation programs which deal with a wide range of disabilities may not be familiar with the communication access needs of individuals who are Deaf or hard of hearing, or with the characteristics of either population. PEPNet has excellent resources for this beleaguered group of professionals: the online handbook Communication Accommodations for Postsecondary Students Who Are Deaf or Hard of Hearing, and two online continuing education classes offered through the University of Wisconsin/Stout, Working with Individuals who are Deaf or Hard of Hearing, and Vocational Services for People who are Deaf or Hard of Hearing. This session offered participants the opportunity to take a virtual tour, learning how to navigate through the sites and how what they learn is directly applicable to service provision.



What we will cover

- Who are Deaf, late deafened, and HOH people?
- Two PEPNet online resources
 - Communication Accommodation for Students who are Deaf and Hard of Hearing
 - PEPNet online continuing education classes through University of Wisconsin/Stout
- Other resources on PEPNet web site



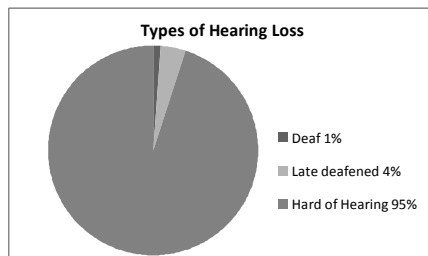
People who are Deaf, late deafened, or hard of hearing

WHO ARE WE TALKING ABOUT?

By the numbers

- 1 in 10 Americans
- About 30,000,000 people in the US
- Numbers will increase with baby boomers & ambient noise

Percentages



Of all individuals with some type of hearing loss, 1% are culturally Deaf, “Big D Deaf” as opposed to those who are audiologically deaf, but not members of the Deaf Culture. Late deafened individuals, or those who lost their hearing as adolescents or young adults, make up 4% of the total population of people with hearing loss. The remaining 95% of this total population are hard of hearing.

Deaf

- Own culture, primary language ASL
- Deafness a difference, not a disability
- English is a second language
- Prefer sign language interpreters for communication

Those who are Deaf have their own culture and their primary language is ASL, or American Sign Language. Members of Deaf Culture see their deafness as a difference from the hearing culture, not a disability. They are proud to be Deaf. For members of this group, English is a second language and they may struggle with reading and writing skills. Sign language is the preferred communication mode for this group.

Late deafened

- Audiologically deaf, but part of hearing culture
- Primary language is English
- Use hearing aids, CIs
- Prefer captions, but some use sign language
- May be grieving loss

Late deafened individuals are audiotically deaf, but remain part of the hearing culture. Their primary language is English. They use hearing aids and cochlear implants. Some learn to sign fluently, but generally they prefer captions for communication access. Late deafened individuals often go through a grieving process not only for their hearing, but other things they lose as a result, including music, relationships, respect or recognition in the workplace, and loss of status even in their own families. for this group.



Hard of hearing

- Very, very heterogeneous population
- See themselves as part of hearing culture
- Use hearing aids, CIs, ALDs
- Use residual hearing
- May be grieving loss

The group of individuals with hearing loss characterized as hard of hearing is very heterogeneous. They see themselves as part of the hearing culture; English is their primary language. They focus on using their residual hearing, so they use a variety of types and sizes of hearing aids, and cochlear implants, as well as assistive listening devices. For larger venues and media they prefer captions. This group of individuals may also go through a grieving process. Denial is very common. The average time between diagnosis of hearing loss and buying a hearing aid is 7 years.



Dispelling some myths



Myth #1

- The milder the hearing loss, the less impact it has on the individual.
- Truth: Research shows children with mild hearing loss have significantly more academic & behavior problems than their hearing peers.

(Bess, Dodd-Murphy, & Parker, 1998)

Children with mild or unilateral hearing loss often do not get the support they need because it is assumed that the loss is negligible.




Myth #2

- Hearing aids fix everything.
- Truth: Hearing aids do not return one's hearing to normal.

(Beck, n.d.)

One of the barriers to successful hearing aid use is unrealistic expectations. Aural rehabilitation refers to the array of services that professionals provide to help maximize hearing aid success. It can include listening practice, speechreading instruction, and learning strategies for hearing in difficult situations. Unfortunately, few professionals provide aural rehab and it is not covered by third party payers.



Myth #3

- All people with hearing loss can speechread.
- Truth: Even the best speechreaders understand only about 30% of what is seen on the face.

(Ross, 2004)

Speechreading is an excellent strategy, but does not allow full communication access. Researchers have never been able to identify specific attributes that make some individuals better speechreaders than others; there are individual differences. However, almost everyone can improve their speechreading skills with practice.



Some PEPNet resources

PULLING IT ALL TOGETHER

The following slides describe two PEPNet products that can help disability service coordinators, program directors in community based rehab agencies, secondary teachers, individuals and their families, and other service providers learn more about hearing loss and the types of accommodations that work for each individual in a variety of environments.



Developed by Dr. Greg Long, PhD
Department of Communicative Disorders
Northern Illinois University
DeKalb, IL 60115

Communication Accommodations was developed during a sabbatical Dr. Long took from Northern Illinois University in 2004. The target audience was disability service providers in postsecondary education institutions many of whom are unfamiliar with hearing loss, the challenges it presents for students in a variety of campus settings, and the types of accommodations that are available and appropriate for individual students.

Characteristics

- Web-based - easy to update
- Extensive internal & external links
- Basic step-by-step
- Versatile - multiple applications
 - Special Ed. teachers in secondary schools
 - VR counselors
 - Families

This tool is a web-based handbook which means it is easy to update. The Center for Sight & Hearing is responsible for checking the links, removing outdated information, and adding new links. It is extensively linked internally and externally, a one-stop resource; users can access as much or little information as they need. Utilizing a step-by-step approach, individuals can create an individual student profile, learn what accommodations are available, and create an access plan for students.




Let's take a tour

- [PEPNet web site](#)
- Click on Resources
- Click on Products and Dissemination
- Click on Downloads
- Scroll down to "Communication Accommodation . . ."
- Click on Web icon




Go ahead! Browse . . .

This tour will highlight how this resource is structured, the breadth of material it covers, how it is linked internally and externally, and the variety and quality of those links.



The home page asks, "What would you like to do?"


- Identify accommodations
- Review a recommended approach for determining appropriate accommodations
- Develop an individual communication profile
- Match a profile with an accommodation plan



Click on dot point #1: Identify potential accommodations available

Scroll to General Recommendations
Click on "preferential seating"
Close window
Click on "Visual alerting systems"
Click on "product catalog"
Click on "adcohearing"
Close window and return to home page


This slide leads you through the resources of the site using two accommodations as examples.



Click on dot point #2: Review a recommended approach for determining --

Click on "Step Two"
Click on "Communicative Environments"
Click on "Science labs"
Close window and return to home page


In this part of the tour, you learn how communication accommodations can differ for the same individual in different campus environments.



Click on dot point #3: Develop an individualized student communication profile

Scroll through the profile.
Click on "Submit"
Click on "home"


The profile is an excellent tool for matching communication accommodations to the individual and a specific environment, especially for a professional new to the field of hearing loss. Take some time to look at the drop down menus.



[Click on dot point #4: Match "typical" student communication profiles . . .](#)

[Click on any profile](#)
[Return to home page](#)


This shows you how the process all comes together.



[Click on "Hearing Loss Info"](#)

[Click on "Orientation to Serving College Students Who Are Deaf or Hard of Hearing" which goes to PEPNet web site](#)
[Close window](#)
[Scroll to "Links to Selected Topics"](#)
[Click on "Hearing Aids and Cochlear Implants"](#)
[Click on the "nidcd" site under "Hearing Aids"](#)
[Close window and return to home page](#)

So far in the tour, you have taken the steps to provide basic communications access for a student. The resources on this site don't stop there. The steps on this slide give you just a sampling of general information when you click on the Hearing Loss Info section.



[Click on "Legal Mandates"](#)

[Click](#) on the "netac" site under "Overview"
[Close](#) window
[Click](#) on "Washington" site
[Close](#) window and return to home page


Information here provides in depth information about the legal aspect of equal access to communication.



[Click on "Resource Websites"](#)


[Scroll](#) down for a quick overview and return to home page

This is a comprehensive list of resources for further information. It also includes resources for assistive technology.



Click on “Feedback” at bottom
of home page

Here is your chance to provide input and
the end of your tour!



Keeping up

Continuing Education through
online learning

When you're a busy working professional, keeping up with certification requirements can be a scheduling and financial challenge. One solution is online continuing education classes like those offered by PEPNet through the University of Wisconsin/Stout.



PEPNet online learning

- Two online continuing education classes
- A PEPNet-University of Wisconsin/Stout collaboration
- Target audience is rehab professionals working in community based rehab programs

Two classes are offered: “Working with Individuals who are Deaf or Hard of Hearing” and “Vocational Services for People who are Deaf or Hard of Hearing.” These classes are a collaborative effort between UW/Stout and PEPNet. While they were developed with rehab professionals working in community rehab programs (CRPs) in mind, these classes have proven valuable for a wide variety of professionals including: Public & private VR counselors, assistive technology providers, disability service coordinators, sign language interpreters, special education and secondary teachers, and workers in medical or rehabilitation settings (nurses, OTs, PTs).



About these classes

- Two levels
 - Basic: Working with Individuals who are Deaf or Hard of Hearing
 - Advanced: Vocational Services for People who are Deaf or Hard of Hearing
- Each module has
 - A video presented by an expert
 - A PowerPoint
 - A transcript

The first class is designed for professionals who have little or no experience working with individuals who are D/deaf or hard of hearing. The second is more advanced for those with some experience in working with individuals with hearing loss who want more in-depth information. Each class has three units, or modules, made up of a video, a slide presentation, and a transcript. This flexible approach considers the differences in individual learning styles. Each unit also has an activity so participants can apply what they have learned. Pre-tests and post-tests provide feedback to participants on their level of mastery.



More . . .

- Natural breaking points in each video
- Each class has facilitator & coordinator from UW/Stout
- Classes are 5 weeks in length

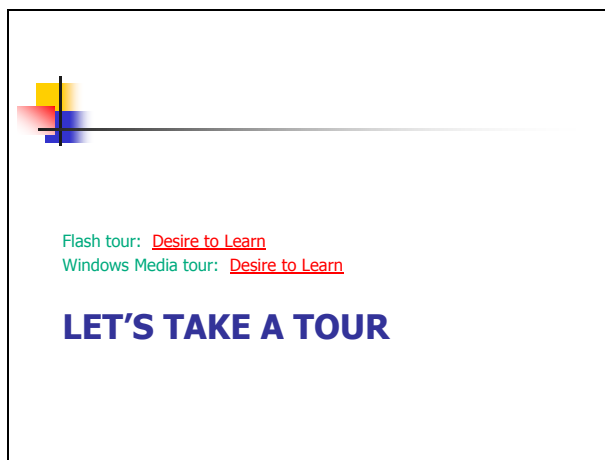
Each video has several natural breaking points so participants are not obligated to watch the entire video in one sitting. The class facilitator and distance learning coordinator are readily available to answer and questions and troubleshoot technology glitches. The classes are five weeks in length. Participants receive a complete or incomplete; there are no grades.



What you really want to know

- Each course earns 10 credit hours or 1 ceu
- 2 hours are ethics credits
- Cost: \$75/class; both classes consecutively \$125
- Group rates available
- Classes start at different times throughout the year

These classes are a very flexible, efficient, and cost-effective way stay abreast of new information and earn CEUs.



To view a video, play slide show by clicking on the screen icon at the lower right of the screen or click on the Slide Show tab at the top, then click From Current Slide. Click on one of the tours above. Give it a few minutes to load. To return to the slides with notes, close the video and click on the PowerPoint title at the bottom of the screen.





Of course, PEPNet has a lot more resources, so check out our web site for more products and training. To go to the web site, play slide show by clicking on the screen icon at the lower right of the screen, or click on the Slide Show tab at the top, then click From Current Slide. Click on More resources above. To return to the slides with notes, close the web site and click on the PowerPoint title at the bottom of the screen.



The Center for Sight & Hearing is an Outreach Site for PEPNet-Midwest. It is one of only two Outreach Sites in a community based rehabilitation program. Community rehab programs are often abbreviated CRP. CRPs provide direct services (e.g., assessment, training, counseling, placement, case management) to consumers with disabilities. The Center for Sight & Hearing has comprehensive programs for those with vision and/or hearing loss.



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Communication Accommodations For Postsecondary Students who Are Deaf or Hard of Hearing

Developed by
Dr. Greg Long, Ph.D.
Department of Communicative Disorders
Northern Illinois University
DeKalb, IL 60115

<http://www.mcpo.org/greg/index.htm>

Go ahead! Browse . . .

Here is a suggested tour:

The home page asks, “What would you like to do?”

1. Identify accommodations
2. Determine what accommodations are appropriate for an individual
3. Develop an individual communication profile
4. Match a profile with an accommodation plan

This tour will highlight how this resource is structured, the breadth of material it covers, how it is linked internally and externally, and the variety and quality of those links. Of course, you are free to design your own tour.

Click on dot point #3: Develop an individualized student communication profile

Scroll through the profile.

Click on “Submit”

Click on “home”

Click on dot point #1: Identify potential accommodations available . . .

Scroll to General Recommendations

Click on “preferential seating”

Close window

Click on “Visual alerting systems”

Click on “product catalog”

Click on “adcohearing”

Close window and return to home page

Click on dot point #2: Review a recommended approach for determining . .

Click on “Step Two”

Click on “Communicative Environments”

Click on “Science labs”

Close window and return to home page

Click on dot point #4: Match “typical” student communication profiles . . .

Click on any profile

Return to home page

Click on “Hearing Loss Info”

Click on “Orientation to Serving College Students Who Are Deaf or Hard of Hearing” which goes to PEPNet web site

Close window

Scroll to “Links to Selected Topics”

Click on “Hearing Aids and Cochlear Implants”

Click on the “nidcd” site under “Hearing Aids”

Close window and return to home page

Click on “Legal Mandates”

Click on the “netac” site under “Overview”

Close window

Click on “Washington” site

Close window and return to home page

Click on “Resource Websites”

Scroll down for a quick overview and return to home page

Click on “Feedback” at bottom of home page

Here is your chance to provide input and the end of your tour!

ACADEMIC ISSUES

Our Piece of the Puzzle: A Comprehensive Cooperative Program Helps Students Put it All Together

Leslie Garber

Abstract

This paper summarizes the information presented in a poster session highlighting the Cooperative Program for the Deaf and the Blind at Spartanburg Community College in Spartanburg, SC. The Cooperative Program was instituted as the result of a partnership formed between the college and the South Carolina School for the Deaf and the Blind in order to serve deaf, hard of hearing, blind, and low-vision students in South Carolina.



In 1986, the South Carolina School for the Deaf and the Blind and Spartanburg Community College (formerly Spartanburg Technical College) formed an alliance to extend postsecondary educational opportunities to deaf, hard of hearing, blind, and low-vision students from across the state of South Carolina. The program, known as the Cooperative Program for the Deaf and the Blind, offers a variety of support services including sign language interpreters, note-takers, reader/writers, and tutors.

Since it was established, the Cooperative Program has served hundreds of students on the campus of Spartanburg Community College in Spartanburg, SC. During the 2007-2008 academic year, the Cooperative Program served 25 deaf and hard of hearing students. Students pursued several majors at the college which include:

- Associate in Arts/Associate in Science (University Transfer).
- Automotive Technology.
- Commercial Graphics.
- Computer Technology.
- Electronics Engineering Technology.
- Interpreter Training.
- Early Childhood Development.
- Office Systems Technology.
- Pharmacy Technician.
- Pre-Nursing.
- Pre-Physical Therapy Assistant.

The most popular majors pursued by students enrolled in the Cooperative Program were University Transfer (AA./A.S.), Computer Technology, Early Childhood Development, and Automotive Technology.

Interpreters for the Cooperative Program are employed through the South Carolina School for the Deaf and the Blind. The minimum hiring requirements for those interpreters include:

- Certification from RID, NAD, or NIC; or
- Graduation from an Interpreter Training Program plus one year interpreting experience; or
- Three years interpreting experience, preferably in the postsecondary educational arena. (Spartanburg Community College, n.d., p. 4)

Several interpreters currently employed by the program exceed these requirements; several interpreters hold or are nearing completion master's degrees, and others hold or are nearing completion of bachelor's degrees in education or a related field.

The Cooperative Program offers one-on-one and group tutoring for students. The tutoring program, which is designed to meet the linguistic and cultural needs of students, is offered in American Sign Language or the language and communication mode preferred by the student. Students can also request an interpreter to accompany them to the college's Tutorial Learning Center for additional tutoring services.

Students have the option to reside in two-bedroom, furnished apartments near the South Carolina School for the Deaf and Blind (SCSDB) campus. The apartments, which are managed by the Spartanburg Housing Authority, are allocated for the use of SCSDB adult and postsecondary students. The Cooperative Program's residential component provides students the use of SCSDB's dining and recreational facilities, transportation to and from the college, and additional afternoon and evening support personnel. Structured student activities, an up-to-date computer lab, and field trips are also available to all participants.

Many students entering Spartanburg Community College were placed into developmental level courses in English and reading. Many of these students were repeatedly failing these basic courses. The Transitional Studies department head agreed to offer a class in which deaf and hard of hearing students could choose to take Developmental English taught by an instructor using American Sign Language. These courses were approached from a perspective that addressed the unique challenges of English usage that students with a hearing loss experience. The first two English courses were very successful. Student feedback has been positive, and both the instructor and Cooperative Program staff observed increased levels of participation compared with other English courses in which these students had been enrolled.

As a result of this successful class, the college Transitional Studies department head has agreed to form a learning cohort if there are enough students. This cohort would take their first level of developmental studies classes together. The cohort will include classes in English, reading, and a college skills class in which critical thinking and study skills are taught. The college skills class will also address other transition issues that cause barriers for these students. It is hoped that this program can boost students' academic successes early in their college career, provide remediation as a bridge to college level academics, and lower the rate of failure for this group of students.

Conclusion

As this paper demonstrates, the Cooperative Program for the Deaf and Blind at Spartanburg Community College offers a variety of services, activities, and resources. The program's success is

due to the cooperation between two agencies: two pieces of the puzzle that complement each other and help students put it all together.

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Academic ASL: It Looks Like English, But It Isn't

Linda L. Ross & Marla C. Berkowitz

Abstract

Sign language interpretation is a primary accommodation provided to deaf students in postsecondary settings. In order to best accommodate the linguistic needs of deaf students in the classroom, an understanding of how American Sign Language (ASL) is used in this setting is needed. The authors have noted there is neither a consistent nor a clear understanding of what ASL used in an academic setting looks like. Interpreters often assume students are using signed form of English when this is not the case. This paper reports on preliminary research, both anecdotal and original, undertaken by the authors to begin to differentiate Academic ASL and signed forms of English used in the classroom.



Introduction

Our linguistic and sociolinguistic knowledge of American Sign Language (ASL) has grown considerably since the earliest studies of the language (Stokoe, 1965; Lucas 1989; Cokely and Baker, 1999). Nonetheless, much remains to be explored. As instructors of American Sign Language (ASL) and interpreting (ASL/English), as well as working interpreters, the authors have noted that such a gap exists in discussing visual language usage in academic settings, particularly post-secondary settings. We frequently hear from interpreting colleagues, “That deaf instructor (or student) signs English,” when what we are seeing is, in our opinion, ASL and not a signed form of English. This led us to begin talking about and exploring what we have come to refer to as Academic ASL. This paper will report our current understanding of the characteristics of Academic ASL based on anecdotal evidence, review of the literature, and preliminary original research. It will also provide an explanation of why this register of ASL is often considered to be a signed form of English by interpreters.

Background

Particularly in academic circles, one hears talk of Academic English. A version of formal register English (Joos, 1961), Academic English is used both inside and outside of the classroom for oral presentations, discussion and written communication to establish oneself as learned. According to Scarcella (2003), “This variety of English entails the multiple, complex features of English required for ‘long-term success in public schools, completion of higher education, and employment with opportunity for professional advancement and financial rewards’ (Rumberger & Scarcella, 2000, p. 1).” The literature on Academic English focuses largely on the written form and its relationship to literacy (see for example, Scarcella 2003; Elbow 1991; Bizzell 1992). This literature also provides us with an identification of linguistic and sociolinguistic features of Academic English. These include distinct stress patterns in pronunciation; the use of technical vocabulary

(also referred to as jargon) and the intentional avoidance of “popular” terms; more marked grammatical structures including conditionals, complex clauses, embedded and subordinate clauses, parallel clauses, passive constructions, double negatives, etc.; an increased number of genres; unique transition and organizational signals; and the voice of authority. (Scarcella 2003; Elbow 1991). This description of Academic English does not stray far from Joos’ (1961) descriptions of formal English where “the defining features of formal style are two: (1) detachment; (2) cohesion” (p. 38) with “pronunciation [that] is explicit...grammar [that] tolerates no ellipsis and cultivates elaborateness, the semantics is fussy...complex sentences” (p. 37) and explicit organization clearly making Academic English a version of formal register English.

With the founding of Gallaudet College in 1864, the more recent post-ADA (Americans with Disabilities Act, 1990), influx of deaf students attending public colleges and universities, along with an ever increasing number of deaf individuals receiving advanced degrees and joining the faculty of colleges and universities across the country, ASL has moved into academic arenas. It follows logically, then, there should be an Academic register of ASL. A review of the literature, however, resulted in no evidence of such a register.

Preliminary Research

Anecdotal

Informal discussions with native English speakers and PEPNet 2008 conference participants, indicate a common understanding of Academic English which supports what is found in the literature. When asked to differentiate social and Academic English, native speakers identified (using lay language) linguistic and discourse features such as technical terms, more “formal” terms as opposed to slang, complete sentences, proper pronunciation, and more clearly structured content relationships. The authors were also told that Academic English required more thought and attention than social English, which the literature identifies as the cognitive need to predict, infer, question, identify assumptions and synthesize meaning in the creation of knowledge (Scarcella, 2003).

Despite the lack of research into Academic ASL, native speakers and interpreters are similarly able to distinguish Academic ASL from social ASL. The author, Berkowitz, distinguishes Academic ASL from social ASL on the basis of the same literacy function that Academic English serves. She states that, as a student, Academic ASL provides the “scaffolding” for literacy in both ASL and written English as well as comprehension of academic content and “building” of academic knowledge. Interpreters and deaf individuals with academic experience identified (again, using lay language) linguistic and discourse features for the authors such as increased fingerspelling for technical vocabulary, the requirement for more thought (cognitive processing), more clearly produced (pronounced) signs, larger use of space in general, use of space to mimic visual aids, concept expansion, and a clear structure that begins with the point. Sociolinguistic features for Academic ASL identified by interpreters and deaf individuals with academic experience included limited turn taking which is characteristic of a formal register (Joos, 1961) and speaking only from the front of the room.

Given the authors posit that academic language use is a version of formal language register, it was not surprising to find the literature on Academic English and the lay understanding of both Academic English and Academic ASL largely reflecting general language features to indicate a more formal register. This led the authors to tentatively propose that Academic ASL include the following linguistic and sociolinguistic features: use of citation forms of signs, that is proper articulation; a restricted lexicon of more “proper” signs; enlarged signing space whether for phonologic, morphologic, or syntactic purposes; and use of unmarked grammatical structure, that is

use of S-V-O structure. (Valli, Lucas and Mulrooney, 2005; Zimmer 1989). Zimmer (1989) also noted the increased use of a marked grammatical structure, the rhetorical question, in formal ASL. The authors had expected that all marked grammatical structures using small movements of the eyebrows or mouth would be reduced or eliminated from formal ASL. In addition to the general features of a formal register, an academic version of the register required a specialized vocabulary and increased cognitive demands for comprehension. Thus the authors would propose that these, too, will be seen in Academic ASL in the form of increased use of fingerspelling and initialized signs for the specification of technical terms (Kelly, 2008).

Original

Preliminary research was completed by the authors with the above conception of the features of Academic ASL in mind in an attempt to clarify our understandings and move them beyond merely anecdotal evidence and inference from the literature. The research utilized commercially available recorded samples of deaf individuals discussing academic material. One recording was taken from the University of Minnesota publication on interpreting in postsecondary settings entitled *Charting the Way: Sign-to-Voice Presentations* (2003). The authors reviewed the presentations on the DVD and identified the deaf presenter Cara Barnett, who most clearly demonstrated what they had been labeling, on instinct, Academic ASL when presenting a history of deaf education. A second recording produced by the CATIE Center at the College of St. Catherine (2002), *Mirrored Math* with Steven Fuerst presenting a geometry lesson, was also used. Finally, a lecture on the use of classifiers in ASL presented by Carol and Andy Lazorisak (Signs of Development, 2003) was reviewed. As a comparison case, Teika Pakalns whose presentation title was “Ireland: Reality or Illusion” which the authors perceived as a model of a signed form of English, was also reviewed. Also, as a means of comparison, the authors reviewed several examples of language use that they considered to be a more social use of ASL including one presented by Debbie Peterson of Ely’s Wildlife (Digiterp Communications, 2004).

The research was conducted as an informal pilot test rather than as formal linguistic research. The authors reviewed each recording noting and discussing the features that lead them to consider the presentation to be one of Academic ASL or a signed form of English. They then identified key features that were used in common by the presenters using Academic ASL and not used by the presenter in a signed form of English.

Several linguistic and sociolinguistic features were found as predicted. First, the authors noted, among the presenters studied, a deliberate use of an overall discourse structure that introduced a subject, provided details and/or examples around the subject, and then provided closure by returning to the main point (sometimes referred to as a diamond structure). The social use of ASL, however, had greater variation in the structure. Beginnings may have identified a genre (telling of a story), established a time frame, or identified a subject. Closings may or may not return to the beginning.

We also found several of the anticipated linguistic aspects of a formal register: citation (proper) formation of signs, reduced use of non-manual markers, and the use of an unmarked grammatical structure (S-V-O). The sample which the authors viewed as an English form of signing shared these linguistic characteristics of formal register ASL. In contrast, the social ASL samples used generally casual registers including reduced sign productions, heavy use of non-manual markers particularly adjectival and adverbial, and both marked (O-S-V, sometimes referred to as topic-comment; relative clauses) and unmarked grammatical structures.

The use of space found in the examples of Academic ASL was different than anticipated. The authors anticipated that space would be enlarged as the literature suggested. However, this was not

the case. Space appeared to be no larger or smaller for the academic samples than the social samples. Perhaps a larger use of space was not found because the samples were videotaped in a studio and not in front of an audience. Likewise, the use of space to mimic visual aids was not noted since no visual aids were utilized in the samples. Nonetheless, Academic ASL seemed to use space in what might be considered a more unmarked morphological fashion by re-labeling it more frequently for reference than social ASL uses where, once labeled, the space is assumed to be known for referential purposes. Space was not used in this way in the sample of a signed form of English. In fact, space was used for linguistic function in a very limited fashion in the signed form of English.

The samples also revealed, as anticipated, fingerspelling and initialized signs were used more frequently in Academic ASL than in social ASL, for the specification of technical terms. In the Academic ASL samples, fingerspelling was primarily utilized in discourse structures designed to support literacy; that is, in accompaniment of a sign being tagged for technical use, along with an explanation of the meaning of the term, along with examples of the meaning of the term, or in conjunction with classifiers that clarify the meaning of the term being presented (Schlepper, 2000). The signed form of English also utilized fingerspelling for literacy purposes. However, classifiers were not used for meaning clarification of the fingerspelling in the signed form of English. In the social ASL samples, fingerspelling was used primarily to label proper nouns and far less frequently to tag specific meanings on multiple meaning signs.

A feature not anticipated from the literature review and anecdotal evidence was the use of pausing. In analysis of the presentations, pausing was noticed to be elongated and more deliberately used to mark transitions and utterance boundaries in Academic ASL (Roy, 1989). A second feature not anticipated was the more moderate overall pacing of the utterances in Academic ASL.

Discussion

Our findings demonstrate that there is justification in considering the existence of an Academic ASL register. Academic ASL can be described with the linguistic and sociolinguistic features identified above. In fact, the features of Academic ASL are quite similar to those of Academic English though structurally appropriate to the visual language. For example, where Academic English uses more marked structures, Academic ASL, because of its visual nature, uses fewer marked structures.

Our findings also seem to imply that the overwhelming reason why Academic ASL is perceived as a signed form of English by interpreters may be the predominant use of unmarked grammatical structures. Academic ASL is a version of formal register ASL and is most often utilized in front of large audiences, therefore, grammatical structures common in social ASL such as rhetorical questions and O-S-V constructions that are marked as unique by small movements of the eyebrows can not be used effectively. Likewise, mouth morphemes for the marking of adjectives and adverbs can not be used. Rather, grammatical information is conveyed by word order alone, S-V-O word order, along with the addition of lexical units for description. The majority of sign language interpreters have learned ASL as a second language. The popular curricula that are available for teaching ASL are based on an informal or, at best, consultative register (Smith, Lentz, and Mikos 1988; Zinza 2006). These curricula emphasize the O-S-V grammatical structure are more common in social registers. As a result, sign language presented in S-V-O order, the predominant word order of English grammar, becomes assumptive labeled as a signed form of "English."

A secondary reason that Academic ASL may be frequently perceived as a signed form of English is the use of initialized signs. It has been long held that ASL did not initialize signs, signed forms of English did. However, upon closer examination, there are multiple accepted signs in the ASL

lexicon that would be considered initialized (eg. family, group, team – all based on a sign with semantics of multiple individuals with a common bond). Again, recent understanding of how ASL expands its lexicon allows for initialization of a common semantic base (Kelly 2008). This is a productive means for ASL to introduce technical vocabulary. Given social forms of ASL have less need for technical vocabulary and these are the registers most familiar to most interpreters, it is not surprising the Academic ASL's inclusion of initialized signs is seen as signed English.

Future Research

While this preliminary research seems quite promising, additional research is called for as this study is limited. First, and foremost among the limitations, is the sample size and make up. Samples for future research must be taken in a variety of academic settings (K-12 through postsecondary) rather than in a studio. This will not only increase the validity of the findings but will also resolve the questions that remain on the use of space (for example, size of space and mimicry of visual aids).

The present study is also limited by the depth of inquiry and comparison samples. Future research must be done more systematically and rigorously than this pilot. Future research must also employ formal ASL in non-academic settings as a comparison to determine if this is really a unique version of the formal register or if it is nothing more than the formal register.

Conclusion

Pursuing additional research on this topic will be highly beneficial. A clear and consistent understanding of Academic ASL, will allow for improved ASL instruction and interpreter training. In turn, more effective accommodation of deaf students in postsecondary settings will be achieved.

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PROGRAM MANAGEMENT

Finding the Right Pieces with Service Agencies: Redefining the Relationship

Naomi Sheneman

Abstract

With the increasing need of service providers to provide classroom accommodations, more institutions are finding themselves outsourcing to service agencies. Outsourcing is a costly option, yet necessary. The San Diego Community College District (SDCCD), with the support of the Purchasing department, redefined the relationships with agencies to ensure accountability, quality assurance and justify the costs.



Why Outsource?

The San Diego Community College District's Interpreting Services Office provides accommodations in three college campuses and six Continuing Education units. We found that with the size of our deaf/ hard-of-hearing student population, our in-house contract and hourly interpreters could not cover all the classes. This is aligned with our legal obligations (ADA, Section 504 & 508). Fortunately, our District allows outsourcing to service the remaining uncovered classes.

SDCCD's Journey with Service Agencies

Previously, this process involved an informal procedure of agreeing on a price between DSPS and agencies. The primary focus at that time was just the price. The District would sign an agreement form from the agencies and then we would get services. The relationship at this time was that we were following what the agencies were telling us what we had to do to get services.

In 2006, the rising cost of interpreting services became a concern for us. We decided to consult the Purchasing department for their help in the process of establishing agreements. The Purchasing department is experienced with the process of identifying qualified vendors, communicating District's expectations, negotiations and monitoring the vendors' ongoing performance with the District. With the Purchasing department's expertise, we were able to:

- Manage the rising cost of outsourcing,
- Define and monitor quality customer service,
- Formalize the existing relationships with service agencies with clear expectations in writing, and
- Set our own terms and conditions.

We learned some lessons from the first fiscal year after trying this approach.

- Lesson #1: “The lower price, the better it is,” is not always true. The focus should be on finding the best package deal. If the overall service quality is excellent with a slightly higher rate, then perhaps this would be the better deal.
- Lesson #2: Clarity is the key. If we are not meticulous with details, then there would be room for confusion and loopholes. We were able to fine-tune the terms and conditions in our contracts to ensure the agencies understood what we wanted from them.
- Lesson #3: One interpreting agency is not enough for a District of our size. We were able to secure approval from the upper management to have a back-up or secondary agency to fill all of our needs.

After two years of navigating through the process with agencies, the District was able to establish a District-wide bid for interpreting agencies which would result in the same agreement for all departments within the District. Previously, DSPS/ Interpreting Services Office had the best rates, terms and conditions. We were able to help other departments that coordinate their own service requests that would benefit from the same rates, terms and conditions, such as Human Resources and ASL/ITP department. The bigger client you are, the more room for negotiation.

Considerations

In the journey with service agencies, we realized that there are several important considerations when selecting agencies. Those are addressed in the discovery process.

- Availability of service providers: Essentially, how large is their pool? Are their service providers available to cover our classes? We have classes from 7 AM to 10 PM daily.
- Agency's office hours: We discovered that it does make scheduling easier if the agencies had similar office hours to ours. This is especially helpful in early mornings when we need substitute coverage for morning classes.
- Office coverage for evenings/ weekends: Do they have an answering service or an alternate system that would enable them to help cover classes at the last-minute in the evenings and weekends?
- Availability of office staff: Do they have staff that is readily available to address our needs?
- Length of business experience: How long has the agency been in business? We ask for references from other educational institutions.
- Communication methods: What is the agency's best communication method? E-mail is the quickest way for our office to do scheduling and we like agencies that can meet us halfway on that.

Examples of Our Terms and Conditions

This is a general overview of our terms and conditions. Agencies were able to meet those terms and conditions.

- Specific rates are identified for day (7:00 AM-5:00 PM), evening and weekends.
- Specific qualifications of service providers that we expect are outlined in our contracts (i.e. no non-certified interpreters, no student interpreters).
- 24-hour cancellation notice
- Billing minimum and increments are clearly spelled out.
- No last-minute/travel fees
- Reassignments are allowed and their service providers are expected to comply accordingly.
- We will identify and specify our needs. They will follow them accordingly and not make decisions on our behalf (i.e. assigning a second interpreter for a 3-hour lab class when we asked for just one).

- Their service providers are expected to comply with the District policies and procedures. We give them a quick reference sheet outlining some important points from our service provider handbooks including the following:
 - Wear a name tag for first-time assignments.
 - Wear business casual attire unless otherwise stated.
 - Compliance of RID's Code of Professional Conduct & NCRA's Provider and Consumer Bill of Rights
 - Report student no-shows *immediately* after the 20-minute waiting period and wait for reassignment information.
 - Work only during their scheduled time.
 - Communicate any changes to assignment information: classroom changes, schedule changes, teacher changes, and any additional deaf/ hard-of-hearing students.
- We agree on an invoicing frequency in writing (monthly or weekly) and delivery method (to who and how—e-mail PDF attachments are best!).

Conclusion

By being clear on all parts of the service provisions, our existing relationships with agencies had taken a positive turn and we have obtained better service. Based on the District's experience in this process, it is highly recommended that other educational institutions work with their Purchasing department to redefine their relationship with service agencies.

Interpreting and Speech-to-Text Services in English Courses for International Students

Kim Thiessen, Brian Buma, Pam Molina Toledo, & Mary Ann Higgins

Abstract

International students who are Deaf / Hard of Hearing are appearing on U.S. campuses eager to learn American Sign Language (ASL) or improve their English skills. There are practical methods that campus disability services staff can use to interpret or provide speech-to-text services for international students with minimal skills in the target languages. Staff can assess these students and advise them on navigating new technologies, providing needed documentation, and adapting to U.S. culture.



Introduction

A Deaf/ Hard of Hearing student walks into your disability services office and needs services. Suppose that student is from Chile and she knows limited Chilean Sign Language because in her home country signing has historically been forbidden, professional interpreters are rare, and only recently has signing been allowed in classroom settings. Her English reading skills are at a moderate level. What will you do to communicate about what services she needs?

In situations like this, campus disability services staff quickly realize that communication requires adjusting to the international student's language skill level, encouraging universal teaching strategies, and trying out new services. Disability service providers who work with Deaf students can start by assessing the student's communication style, English/ASL skill level, and goals for being in the United States in order to provide appropriate services.

Aside from the details of language lessons, there are the broader adjustment issues that international students may face in entering a new culture. The process for acquiring accommodations, the differences in technology access and cultural perspectives, and the budgetary concerns and solutions are important to consider. Also, Deaf/Hard of Hearing services staff can use some of the resources that are available related to intensive English language learning for Deaf and Hard of Hearing students.

Background

If an international student is enrolled on a U.S. university or college campus; if she has a student ID card for campus; if the program, no matter what it is, is physically located on the campus; and if the student is paying any kind of fees for the dorm or meal plans, etc., then that U.S. university or college is liable for paying for any needed disability services for that student. With ten percent of U.S. postsecondary students who are Deaf or Hard of Hearing being international students

(National Survey on Student Engagement, 2006), this requires a combination of advance consideration and quick planning.

Language Assessments

“Now, for me I flew here, and upon my arrival it was a huge culture shock because American culture is so different from South American culture. And when I got to the University, I went to the disability office, but they weren’t sure how to work with me as I was their first signing international student.”

There are several recommended steps to take when international students who are Deaf and need services arrive on campus. An English language assessment should be done, if it was not done in the home countries. Some students work to improve their English skills before they arrive, but still may need some assistance/support to improve in that area. If they completed a Test of English as a Foreign Language (TOEFL) evaluation, those scores should be available to the disability services staff through the program the students are entering on campus.

Next, staff can look at what kind of signing skills the student has, whether he is skilled in American Sign Language (ASL) already; whether he uses a Pidgin Sign English (PSE) or Signed Exact English (SEE); or whether he doesn’t have any kind of sign language skills. Also, staff can assess if the student knows his home country sign language, or if he has any speech-reading skills for his home country language or English.

And then staff can find out what kind of general communication skills the student has. Staff can informally evaluate how the student communicates. Maybe the international student doesn’t have any speech-reading skills or any signing skills, per se, or any English, but staff can assess how the student communicates when sitting down one on one. Lip-reading skills are an option, but for some international Deaf students, it can be difficult to lip-read English if English is not their native language. Sometimes staff can use gestures to get the point across.

“Now, how did my Deaf friends learn English in the USA? This is what they shared with me. If you can imagine a triangle and a circle and a square with colors – the triangle would be the subject, you would have the circle as the object, and would you have the square as the verb. And so there was a lot of manipulation of these three components of English, and because they were in color I could see the shapes as well as the color, and that helped me to understand the language better and then be able to put it in ASL. And, again, that helped them in learning the language and helped them to improve their English.”

Services

Next, staff can think about appropriate services for the student. Consider if the student could use an ASL interpreter, a Certified Deaf Interpreter (CDI), a note taker, speech-to-text services in the foreign language or English, or other services. Based on the Deaf international student’s language skills, staff can determine what might be the best services for a particular student. If the student is Hard of Hearing rather than Deaf, and she came to the U.S. to learn English, staff can consider speech-to-text services because she wants English; she doesn’t want ASL initially.

“They offered me speech-to-text services, and that was okay, but when the teacher wanted to ask me a question directly, they didn’t know what to do. So, I didn’t have equal access to my classmates. We used paper, which was a very lengthy process, and I had to say that it was not an equal access environment, and I was very frustrated with it. And so, they brought somebody in to translate from Spanish to

English for me. But I still didn't have the English skills to communicate what I knew. It was a very slow process. I knew English, and so there would be speech-to-text, but if there were a lot of conversation going on in the classroom, I would miss the information."

Some international Deaf students come to the U.S. to learn ASL. Staff can usually get that out of an informal individual assessment. Sometimes an international Deaf student might want other services but he might not know about them initially. Staff can go through and show him all of the different services that are offered on the campus that he might never have seen before in his home country.

On an individual basis, staff can also consider the cultural considerations so the student can receive the best services possible from the disability services office and in the classroom setting. Staff can review the student applications and encourage students who contact them to fill out additional information to help avoid misunderstandings and find out more about the country they are coming from. Details requested could include the kind of communication a student uses at home; if the student is part of the Deaf community or the hearing community there; if she grew up in a hearing family; if her family signed; the type of school she attended; if the student has family in U.S.; how long she has been in the U.S.; if she is familiar with American culture, etc.

"I recommend that campus interpreting services has available Certified Deaf interpreters. It's an important service to provide for the Deaf international students, particularly when they first arrive on campus and they don't know ASL. That would give them the opportunity to learn the language."

The disability services staff can also include the campus international student office. Staff can contact them to ask about cultural information, find other students from the same country, or gather other information that is helpful to determine appropriate services.

The Classroom Setting

Staff next can think about the kind of academic program the student is entering. Is it going to be a general university class, or some kind of an intensive English program? These are very different. Staff can consider content and what kind of students are going to be in that class.

Intensive English programs are full of international students. Maybe the student will feel more comfortable in this environment with other international students. General university classes are very different. And then there is the style of instruction. Is the course instructor going to be a regular university professor who talks quickly and makes it difficult for the student to understand anything? Or is going to be an English language teacher who is used to adjusting his lessons to the language level of the students?

Disability services staff can meet with the faculty or the intensive English instructors. Staff can find out if the faculty or instructors have any previous experience with Deaf and Hard of Hearing students, if they know anything about the culture, if they have any resources, or if they have worked with interpreters or speech-to-text providers before. Staff can explain the services that will be provided in the classroom so the instructors understand what to expect.

Later, disability services staff can inform the student of any additional resources on campus and in the community, such as clubs on campus, local host family programs, Deaf community programs and meetings.

“They helped me to know where to find other deaf people. They helped me connect. And that really gave me a sense of peace, and I didn't know their Signs, and they didn't know my Signs, but we were still able to bond.”

Community Connections

It can be a pivotal and positive shift for international students when the campus disability staff offers community resources to Deaf international students to help them make contacts in the community outside the campus. Staff can give them information about local Deaf organizations so they can connect with peers and learn about U.S. Deaf culture, especially if there are not many Deaf students on campus. Staff can also provide ASL course information if the campus does not offer that course and it is needed.

“I went to learn ASL with a Deaf teacher. I was doing this simultaneous to taking the course with the speech-to-text provider and everything else. And my level of frustration was just incredible. But within a year, I had learned to communicate with the Deaf community in Chicago. My communication skills improved drastically, so then the university was able to provide me an ASL interpreter and I was able to actually participate in the lectures to give responses and to share my opinions.”

If the students don't make other social/peer contacts, they can become isolated. Staff reported that students often take a lot of classes, and study continuously so they don't have to go out and make friends because of their concern about their limited English and communication skills.

Isolation can affect administrators and service providers because students may feel that those individuals are the only people who really understand and the only people who can really communicate with them. It can lead to an unhealthy attachment to usually the interpreters or the speech-to-text providers, or the disability service office.

The National Clearinghouse on Disability and Exchange (NCDE), administered by Mobility International USA, is one community resource available for Deaf international students as well as campus disability staff. The NCDE is sponsored by the U.S. Department of State to serve as a comprehensive one-stop resource for disability providers, international exchange staff, and people with disabilities or who are Deaf and Hard of Hearing related to making arrangements for people with disabilities to participate in study, work, intern, volunteer, research, or teach abroad programs. This includes international students and English language students with disabilities who come to the United States from other countries. From online tip sheets and success stories to one-on-one information and referral services, the NCDE provides free assistance when reached through their website at: <http://www.miusa.org/ncde>.

“I finished my graduate degree courses, and am actually in the process of writing my thesis analyzing Deaf Chilean students. I am advocating working in the University as a graduate student, particularly through the office of disability services in providing communication access and counseling. It's been a very good experience for me.”

Conclusion

Having international students who are Deaf on a U.S. university campus brings diversity enrichment to the campus. Services can be expensive if you are providing a lot of services, but it is wonderfully enriching for the hearing students, the Deaf students, and everybody on campus. Staff can work with the student to provide the best possible academic accommodation services, but also

seek out help and assistance from other community resources such as the NCDE and local Deaf community organizations to assist with cultural and social issues.

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Shift Happens: Reframing Disability and Reconsidering Paradigms

Sharon Downs, Melanie Thornton, & Amy Hebert

Abstract

This paper will discuss a current paradigm shift in how we frame disability. We'll demonstrate how business as usual is not an option and that accessibility should be seen not as a matter of compliance but as a matter of social justice. We will explore what's wrong with the status quo, where our field is headed, and how you can bring your colleagues and your institution with you on this exciting journey. We will present a case study in making the paradigm shift, providing the reader with tangible changes that were made, including office name, mission statement, and tag line. Other changes, such as office structure, documentation guidelines and job descriptions are on our website, which will be provided. All of these are changes the readers could replicate in their own institutions and environments.



Introduction

Get ready to take a few steps back and reconsider assumptions you've worked under for years. The way you and your colleagues frame disability may be in need of an overhaul! There is a paradigm shift happening that is changing how many of us do our jobs. A simple way of conceptualizing a paradigm shift is to think of looking at the world through different lenses. There is such a paradigm shift happening in the area of disability. The way things have always been done is just not good enough any more. This paper will explore what's wrong with the status quo, where our field is headed, and how you can bring your colleagues and your institution with you on this exciting journey.

Historically, society has viewed disability in a negative light. In this view, the disability is a "problem" that exists within the person and the goal is to "fix" the person. This paradigm is often referred to as the medical model of disability. A newer paradigm is referred to as the social model of disability. In this paradigm, disability is viewed as "the systemic mismatch between physical and mental attributes of individuals and the present (but not the potential) ability of social institutions to accommodate these attributes" (Schriner & Scotch, 2001). As institutions of higher education begin to make the shift from the older paradigm to the new, we will see changes in policy and practice that reflect this new perspective. Business as usual is not an option and accessibility is seen not as a matter of compliance but as a matter of social justice. It becomes clear that good design means, among other things, that a product, process, or environment is, to the greatest extent possible, usable by everyone.

The Disability Resource Center at the University of Arkansas at Little Rock is a case study in making this paradigm shift. The DRC underwent some radical changes beginning in 2007, moving from medical model to social model. Those changes, including mission statement, office structure, documentation guidelines and job descriptions, will be shared in this paper. In addition, we will share our vision for our whole university in regard to the social model, and will explore what changes you can make in your own institutions and environments.

So let's take a step back and consider why we do what we do. Why is accessibility important? The old rationale was that we were concerned about accessibility in order to be compliant with the law and avoid an OCR complaint. The new rationale is that we are concerned with following not just the letter of the law, but the spirit of the law. The ADA is civil rights legislation! Accessibility is a social justice issue, not just a compliance issue.

Messages We Send

The manner in which we conduct business sends messages to students and to the whole campus. What messages do we want to send? We'd like to send the message that we value all students. We welcome input from everyone. Collaboration is the way to get things done. Students are the experts on their own disability. And barriers in the environment are what we should be working to reduce – that is where our efforts are needed.

But we may unintentionally be sending messages that don't reflect our values. For example, when we place so much emphasis on documentation, we send the message that we are closed to input from students about their own disability. When we use language like 'specialist' to describe ourselves, and 'impaired' to describe the student, we are providing subtle commentary on the hierarchy of the involved parties. When 100% of our efforts are focused on individual accommodations, rather than working to make the environment more usable, we are sending a very medical model message that the problem resides within the individual.

The Social Model of Disability leads us into thinking about how we do what we do. The focus becomes more on universal design, and less on individual accommodations. Universal design is a concept that emerged from the architectural field that is now being applied in other arenas. There is a growing national trend to develop and apply this concept in educational settings. One of the pioneers of this effort is Frank Bowe (2000, p. 45), author of Universal Design in Education. He defines universal design as it applies to the educational setting as "the preparation of curriculum, materials and environments so that they may be used appropriately and with ease, by a wide variety of people." Many educators have embraced the concept of universal design because its application enhances instruction for all students. When environments are designed based on the principles of universal design, everyone benefits, and individual accommodations become much less necessary.

But what does that look like? Here are two examples.

Example 1:

A university establishes an emergency notification system for faculty, staff and students, and it consists of voice messages calling land lines and cell phones.

This system fails to take into consideration the wide range of needs reflected in a diverse college community. It requires that work-arounds be established to meet the needs of students, faculty, staff, and administrators for whom a voice message is ineffective.

Here is the same situation, but rethought considering the principles of universal design:

A university establishes an emergency alert system that includes voice calls as well as text messaging.

Who is now included that wasn't included in the original scenario?

- Deaf and hard of hearing students
- Younger students for whom texting is part of their culture
- Everyone! This is not simply a disability issue. It is a design issue. This new system is much better designed because it considers the needs of **all** users. The authors of this paper pose that we would never answer a voice call during a class or a meeting, but we would surreptitiously check a text message. And if there is a shooter on campus, we want to know right away, not when the class is over. That is universal design. The system is designed with everyone in mind.

Example 2:

A student with a learning disability needs a notetaker in her classes, and provides a flyer from the Disability Resource Center requesting a volunteer from the class to step forward.

This is a very common scenario that is used at universities and colleges all across the country. However, it is an accommodation that must be worked out each and every time this student begins a semester. It is a work-around for this student, because the way the class is set up is not accessible to her.

Here is the same situation, but rethought considering the principles of universal design:

Faculty post their lecture notes to the web prior to each class, or ask students to each in turn take notes for the entire class that are then posted.

Who is now included that wasn't included in the original scenario?

- Non-traditional students
- Students for whom English is a second language
- Students with a learning style that differs from that of his or her instructor's teaching style
- Students with disabilities
- Any academically at-risk groups

And a wonderful side benefit of this universal design approach is that students with disabilities don't have to go through the whole 'separate but equal' experience of requesting an accommodation. The course is designed with all the diverse possibilities in mind, and everyone benefits. In this scenario, the Disability Resource Center isn't even involved, because the course was designed so well from the outset. And the instructor doesn't have to take up valuable class time to arrange for the accommodation of a volunteer notetaker. It's truly a win/win situation!

How We Express Our Values

You may not realize everything you put 'out there' that tells others about what you value. Many people think only of their mission statement when asked about what their department values. But really, how long has it been since most of us have even read our mission statement? How many years has it been since it was revised?

Case Study: The Disability Resource Center at the University of Arkansas at Little Rock

In 2007, the DRC at UALR began the process of evaluating what we do, how we represent ourselves, and how we live out our values. During this process, we looked at all of the following items and determined if they fit into our current way of thinking. We assessed how well they represented the Social Model of Disability, and if they utilized the principles of universal design.

- Office name
- Mission statement
- Office tag line
- Position titles and descriptions
- Office Structure
- Syllabus statement
- Letter to professors
- Documentation guidelines
- Terminology such as “intake” or “case notes”
- How we represent ourselves on the web
- All policies and procedures

At the end of this evaluation process, we realized we had many dramatic changes to make. Here are a few of the changes:

Office Name

Old	Disability Support Services
Problems	The terms “support” and “services” are more medical model terms. They imply that students with disabilities need “support” and they keep the focus on the student as the problem rather than placing the focus on the environmental barriers.
New	Disability Resource Center
Reasons for Change	<p>We want to create an image that is consistent with the other shifts we have made over the years. We are a resource to students and to the campus community and provide services to both.</p> <p>Often, in fact, our role is to assist the campus community in creating more usable and inclusive environments. When this is accomplished access for students with disabilities is seamless.</p> <p>The name “Disability Resource Center” indicates that we are a resource to students as well as other members of the campus community. Through the years we have taken on the role of providing resources and technical assistance even beyond the campus community, in both a routine and very regular way when our colleagues from other institutions call us for assistance and advice, and through programs such as PACE and PEPNet-South/Arkansas SOTAC.</p> <p>Some offices are choosing names that place the focus more directly on the environment—such as Center for Educational Access or similar names. We acknowledge that these names do indeed reflect social model in that they place the responsibility for access less on the student and more on the environment. However, some proponents of name changes that remove the term “disability” argue</p>

that students steer away from their office because of that term. This is a reflection of the problems of our society and the lack of acceptance of diversity. We want to change the way people think about disability rather than shrink away from the reactions that people have to that term. We hope that through our work, our campus community will begin to see the power that goes along with that term and will embrace the rich history of the disability rights movement. We hope that they will come to see disability as an aspect of diversity that is integral to our society and to our campus community.

Mission Statement

Old

The mission of DSS is to eliminate physical and academic barriers and to fulfill the Division of Educational and Student Services concept of assisting students in achieving their educational, career, and personal goals through the full range of institutional and community resources. In addition, the office was established to insure that students with special needs receive support services and accommodations to allow them equal access to all UALR programs, and that they have the opportunity to realize their potential.

Problems

This mission statement was written several years ago and the language reflects more medical model thinking. Words like “assisting,” “insure,” “support services,” and “allow” emphasize the DS professional as being the expert who is helping the student achieve access and success.

The phrase “students with special needs” is considered patronizing by many people with disabilities. It also places the focus on the student rather than the environment.

New

Providing access to a diverse student population is embedded in the philosophy of the University of Arkansas at Little Rock.¹ We recognize disability as an aspect of diversity that is integral to society and to the campus community. To this end, the Disability Resource Center collaborates with students, faculty, staff, and community members to create usable, equitable, inclusive and sustainable learning environments.² We promote and facilitate awareness and access through training, partnerships, innovative programs and accommodations.³

1-Adapted from Educational Student Services Mission Statement.

2-Adapted from AHEAD “UDLI-endorsed” mission statement.

3-Adapted from University of Arizona’s mission statement.

Reasons for Change

The new mission statement is more consistent with new thinking about disability and with the current focus of the office.

It emphasizes the collaborative role of the staff and the emphasis on changing the environment rather than simply responding to each student’s access request.

When we collaborate with students we are recognizing their own expertise in resolving access issues.

Words like “usable,” “equitable,” “inclusive,” and “sustainable” are

central to the concept of universal design.

Office Tag Line

Old	The Education You Want, The Services You Need
Problems	The focus is on the student's needs, not on the need for changes in the environment. It communicates that the student needs professional services to get an education
New	Creative Solutions. Together.
Reasons for Change	This can include either environmental changes or accommodations, but it has a more positive feel and emphasizes collaboration.

For a more complete list of changes we've implemented over the last year or two, please go to this website: <http://ualr.edu/pace/index.php/shift>

Where We Go From Here

We are still working toward the social model of disability in our office, and working toward universal design. We aren't done. It will always be a work in progress. But we've also expanded our focus to include the entire university. We realize that in order for universal design to be a reality at UALR, we had to involve the whole campus. We wrote a paper entitled, *A Campus Commitment to Universal Design*, that can be found at ualr.edu/pace/index.php/commitment/. It was primarily authored by Melanie Thornton, with help from Susan Queller and Sharon Downs. It states what we see as necessary steps for us all to take to achieve our vision. We have done several presentations across campus, including to the Chancellor's Leadership Group, the Deans Council, the Academy for Teaching and Learning Excellence, Staff Senate, and Faculty Senate. Our Chancellor has fully supported our efforts, which is a big step in getting us where we want to be. However, we recognize that change comes from below and not from above, and so we will continue our efforts to educate faculty, staff and administrators on universal design and the Social Model of Disability, to help these concepts become part of our campus culture. We are utilizing faculty who are very familiar with these concepts and who support what we're doing to make presentations to their colleagues. We've tied our efforts to the university mission statement and the new strategic plan.

An important part of this commitment paper is the recommendations we provide. Here is that section in its entirety.

Recommendations

The authors of this paper recommend that the University of Arkansas at Little Rock adopt the social model of disability and universal design through the following actions:

1. Adopt a formal campus-wide commitment to universal design and publish a summary statement on key web pages and in undergraduate and graduate catalogs.
Sample statement: *The University of Arkansas at Little Rock values people with disabilities as an integral part of our diverse campus community. We are committed to the creation of usable, equitable, inclusive and sustainable learning environments based on the principles of universal design.*
2. Infuse universal design concepts in faculty and staff training—especially training that relates to course design, Web design, information delivery, and service delivery.

3. Implement a campus diversity initiative and include disability as an aspect of the diversity that is an integral part of our campus community.
4. Revisit campus policies and adapt them to reflect this paradigm shift.
5. As staff and faculty orientation materials are developed, incorporate messages that promote this philosophy as a part of our campus culture.
6. Use the principles of universal design to guide construction/development of all aspects of the campus environment: the built environment, classrooms and labs, the IT environment, instruction, programs, and services. Engage faculty, staff and administrators in identifying disabling environments and reconstructing them based on these principles.
7. Hire architects who are trained in universal design principles and involve the Chancellor's Committee on the ADA in the early planning stages for new buildings and remodeling projects.
8. When we have to retrofit a process, product, or environment or provide an accommodation, consider this a signpost pointing toward the need for redesign.
9. Promote inclusive, equitable design with our vendors or potential vendors by communicating the need for products that are usable, to the greatest extent possible, by all of our students, faculty, staff, visitors, and alumni and purchasing products that meet our standard.
10. Utilize the following as guiding principles as we move forward toward this vision of a more equitable, sustainable and usable campus environment:
 - Disability is an aspect of diversity that is an integral part of society.
 - Disability is a social construct resulting from the present inability of social institutions and designed environments to accommodate individual differences. (Schriner & Scotch)
 - Access is a matter of social justice.
 - Good design means, among other things, that a product, process, or environment is, to the greatest extent possible, usable by everyone.
 - Creating and advocating for usable, sustainable, and inclusive learning environments is a shared responsibility.

Many positive changes are already occurring on our campus. The shift has already begun to take place as DRC representatives are invited to the table in the planning stages of Web development, software purchases, and other decision-making processes. It is our hope that by taking a formal position on this important issue, we can work together to create a tipping point that make this paradigm the primary lens of our campus community and will make our vision become our reality.

In Conclusion

Shift happens – we're proof! But it doesn't happen without commitment, a vision, and a plan. It is our hope that you are now dissatisfied with the status quo, and are ready to take a step in the direction of reframing disability and embracing universal design and the social model, both for your department and for your campus.

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From Idea to Implementation - Universal Design in Action

Arlene C. Stewart & Tara Seyller

Abstract

The presenters demonstrated how one relatively small public university has managed to employ universal design concepts in certain settings across campus. Presenters will share their experiences in providing open captioning for commencement exercises as an example of how collaborative efforts can pay off in increasing access to all types of university programming.



Introduction

Sometimes you find yourself in situations that confound you. Dealing with those issues gives you an opportunity to not only meet the specific challenge but also to go beyond your known resources and skills and to achieve something that was originally quite idealistic. At Clemson University, we have been discussing for a long time how to implement Universal Design (UD) concepts on campus in a way that would make UD real, and manageable, and attractive to administration, faculty and staff members. Such an opportunity came to us a few years ago and although it took us a while to implement UD as a response to the challenge, we now have a real, manageable, and attractive response.

Clemson University is a small, top-30 public institution, in the rural Upstate area of South Carolina. We have about 14,000 students on campus. Students are required to come with a laptop and have many requirements for electronic data submission and development while they are at Clemson, including the development of an e-portfolio and the use of podcasts, clickers and other means of electronic communication.

Student Disability Services typically serves close to 700 students per year, providing the wide gamut of services from screen-reader services, to extended testing time, to interpreting to notetaking and other in-class and out-of-class accommodations for students with all types of disabilities. Like most disability service providers in higher education, we typically respond to student needs in as efficient and effective a manner as possible. We work hard to make sure that our students have access to services both in the classroom and out, and we try to help the students learn how to advocate for themselves.

Paradigms for Service Delivery

Some time back, we realized, however, that we were using the old medical model for services – that is, we were functioning in such a way that presumed that the student had a problem that was theirs and theirs alone and that we would try to “fix” that problem when the student asked for help.

The way in which “fixing” the problem worked often jeopardized the student’s confidentiality and sometimes was slow in being implemented.

As a program, we decided to try an approach that would use the concepts inherent in Universal Design and that would encompass a more interactive model of service delivery. The interactive model is much more student-centered and expects that the student be proactive, putting services in place before there is a specific need. The model also expects students to be engaged, involved participants in the services process, dealing directly with professors and advocating for themselves in a manner that is non-threatening to faculty but also clear and direct in specifying appropriate accommodations in the classroom. The approach incorporates the idea that the need is not for a “special accommodation” but rather for something that will allow the student to perform at optimal levels despite the identified disability. The interactive model, as we interpret it, is very effective and appropriate, and incorporates another model... Universal Design.

Universal Design

The concept of Universal Design comes from the work of Ron Mace at North Carolina State University in the early 1990s (The Center for Universal Design, 2008). Mace, an architecture and design professor and the person who coined the term Universal Design, saw that in his field and in others, it would be a better idea to plan for the needs of people in general rather than fix the problems for individuals with disabilities when they arise. The design of products and environments to be usable by all people, to the greatest extent possible, without adaptation or specialized design is his definition of the term.

Some of the basic understandings about Universal Design, especially in higher education, are as follows:

- Focuses on usability, not accessibility
- Is minimally concerned with code/legal requirements
- Is sustainable, stable, and equitable
- Involves entire community/institution
- Based on a user-centered approach
- Idea is to change the environment, not the student
- Removes barriers
- Anticipates rather than reacts
- Is largely invisible

In working to make Clemson’s services more interactive and more in keeping with the Universal Design concept, we adopted a goal of using Universal Design concepts not only in revamping our service delivery but also of educating people in administrative, staff, and faculty positions what that means and how to implement it. We’ve distributed literature to faculty, spoken at meetings, and discussed the UD concept at every opportunity. A few issues about interpreting at graduation led us to a perfect way of not only talking about UD but also of demonstrating it.

Graduation

As on other campuses, graduation—especially the big May/June graduation ceremony—is an opportunity for the University to show thousands of graduates, relatives, and others what a wonderful campus we have and how well we do things. In the Student Disability Services office, however, we had some concerns as related to access for students, and family and friends who are deaf or have hearing disabilities.

If we had a request for interpreter service for graduation, because of the design of our coliseum where the ceremonies are held, the only place an interpreter could stand was on the dais with all the

dignitaries. This proved to be far from ideal in that it was difficult to position the person who requested interpreter service in an appropriate place to have uninterrupted visual access between the interpreter and the person who requested services. It also presented a problem on the dais... where to put the interpreter so that members of the stage party were not looking at the back of the interpreter? One year we tried “the interpreter on a box” method. We put a wooden box behind the dignitaries for the interpreter to stand on. It worked, but it put the interpreter at a greater distance from the persons who requested the service, making it more difficult for the signs to be seen clearly.

Enter Universal Design. As we discussed the issues with interpreting, it became clear that many people who come to graduation ceremonies could use help in understanding the speeches and directions given from the podium but that most would not know to request services, assume that services may not be available, or just not want to request services and make their needs known. Grandparents with hearing issues, English as a second language speakers, those who have noisy children next to them, and those who were just not paying real close attention, in addition to those with hearing problems, could all benefit from open captioning.

We realize that we could have hired someone to come in, bring all the equipment, and do the captioning. We also know that that is an expensive proposition and that our budget could not handle an outside captionist so we decided to do it ourselves. Other than about \$5,000 for a one-time expense for equipment, the costs are minimal; we now have the equipment to use not only at graduation but at other events and in other venues.

Before we did graduation captioning, we had an opportunity to experiment in other areas and with other equipment. Our Alumni Office had requested help with hearing amplification for two of their spring activities which are heavily attended by older alumni who are likely to have hearing issues. We explained the Universal Design concept and asked them if they were willing to let us try the captioning at their events rather than provide amplification systems for a limited number of attendees. Those brave souls were willing, and we captioned three of their events in the year or so before we captioned graduation. Captioning at Alumni Association events was very well received and gave us the confidence we needed to do it in a bigger venue with a much larger audience.

Our coliseum, like many is also our basketball venue... with a lovely, large screen that is used for the scoreboard. The screen sits in the middle of the coliseum, moves up and down, and can be seen from every seat in the building. We set about finding out how to gain access to using that screen so that we could do captioning during the ceremonies in a way that could be easily accessed by the audience and yet was virtually invisible.

Collaboration

The need for collaboration became very clear as we began to work our way through all the questions that came up. It was interesting to us to learn how many different units on campus would be impacted by our efforts and how many would impact our activities.

The Graduation Planning Committee had many questions about how it could work, about the reliability of the system, and about the expense involved. Their questions were quite legitimate and took a while to work through.

The coliseum staff was most helpful in working with us to figure out how we could use our captioning equipment to plug into their system. There were two pieces of equipment missing: an encoder/decoder and a video switcher. Our campus computing department agreed to buy the video switcher since they could see the need for that equipment in the future in some of their activities.

The Dean of Undergraduate Studies was able to fund the encoder/decoder. The cost of a captionist for both ceremonies was approximately the same as the cost of two interpreters for the one ceremony.

Clemson Video Production Services always films graduation ceremonies, so there was no problem having cameras on site. The only difference was getting them to give us a live feed during the ceremony. At one point, a technician had to make a cable with an appropriate plug, but he was very willing to do that. In fact, he checked in with us frequently on the day of the first captioned graduation ceremonies to make sure it was working as it should. Since then we've been able to buy a cable (for less than \$40.00) to replace the homemade one.

Others became involved in the collaboration. The President's Office provided scripts for the ceremonies and for speeches by honorees. The Registrar's Office gave us a list of graduates by college and degree. The Director of the choral group gave us the words for the music. The Student Affairs Office gave us the script for the devotionals to be delivered by students. And the Communication Studies Department gave us a copy of the award-winning speech to be delivered by the student speaker. All this information was pre-loaded into the captioning program so we could follow along during the ceremonies to make sure we were showing the right information. We also had the option of switching to live captioning if one of the speakers chose to *ad lib*.

On graduation day, the coliseum staff provided an operator for the video switcher and Disability Services provided a person to help with logistics, should there be any problems. The logistics person also stayed in touch with members of the graduation committee to make sure there were no changes to the prepared script. Other staff needed to implement the process included the captionist and a reader to make sure that what is showing on the screen is what should be there.

Equipment Resources for Graduation Captioning

The following equipment is what we use. Note that we chose to use the 600 version of the CPC Caption Maker software. We have found this equipment to be both affordable and dependable.

Component	Source	Price	Purpose	Notes
Laptop computer with speed typing or voice recognition software	Various	Already in-house	Support captioning software; live captioning input	Check with CPC for compatibility of speed typing or voice recognition software with Caption Maker software
CPC Caption Maker software	Computer Prompting and Captioning Company www.cpcweb.com	CPC500 \$1995.00 CPC600 \$2995.00	Interfaces with encoder/decoder to place captions over video feed and send to display	CPC 500 handles live captioning ONLY; CPC 600 allows prepared scripts to be sent to screen as they are spoken

Encoder/Decoder Link PCE-845D	Link Electronics www.linkelectronics.com/home.htm	~ \$1200.00	Mixes captioning from laptop with video feed for output to screen	
RS 232 Cardbus PC Card (Koutech Systems Inc)	www.newegg.com	\$34.99	Connects laptop to encoder	The enclosed cable is short and may need an extender cable
Video feed	Video camera(s)		To mix with captions at the encoder	
Display screen			For display of mixed video and captions	Size and type depends on audience

Note: Costs indicated reflect the authors' experience when initiating this activity and may change over time.

Benefits of Graduation Captioning

We are pleased to report that Clemson University now considers captioning at graduation a service that is to be provided whether there are requests for interpreters or not. The comments from audience members-at-large have been very positive. Attendees with hearing issues are pleased that they no longer are singled out to receive services and that they have the option of sitting anywhere they would like in the coliseum, just like every other attendee.

A side benefit that parents appreciate is the opportunity to see their graduate's face on the large screen as they enter the coliseum. They also then get a good view of their graduate as they receive their degree from the university president.

Conclusion

Open captioning for large-scale events such as graduation is a very appropriate and helpful accommodation for individuals with hearing issues. In addition, it is a very appropriate and helpful service for all attendees, regardless of disability issues. We at Clemson encourage you to try it. You and everyone else will like it.

Resources

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Anticipating Diversity: Weaving Universal Design into your Campus Tapestry and Beyond

Sharon Downs & Melanie Thornton

Abstract

Implementing universal design concepts on a college campus requires involving the whole campus. To undertake such an effort, those involved must be openly committed to the values of inclusion and the social model of disability. This paper explores the strategic planning process as a tool for moving your campus forward – for opening minds and changing the culture at your school. We review the values that drive current practice, explore the tenets of organizational change, and discuss the social model of disability as a way to reframe disability and move your campus forward toward the vision of universal design.



Introduction

Most of us recognize the need for change toward a more universally designed, inclusive environment. We value, or even embrace, the concepts of universal design and inclusion. Many of us even try to put the principles into practice in our sphere of influence and incorporate them into our professional development activities. At the same time, many of us feel powerless to initiate change on a higher level in the institutions where we work. We are left with more questions than answers. What is the current organizational culture? How does change happen on an organizational level? How can we play a role in making it happen?

Our challenge is not a new one. Corporations have faced this challenge for many years—the challenge of getting people moving in a new direction, the challenge of obtaining support for new ideas. The problem, then, is not that it cannot be done, but that those of us who are most interested in seeing these changes happen do not have all of the information we need. We can step outside of our discipline and benefit from the knowledge base of organizational change strategists who have worked to change corporations for years. There are many and varied strategic approaches that we can adopt as models.

Organizational change can seem like a daunting task, and there are many books and models out there that can feel overwhelming to process. However, most of them can be whittled down to the following seven ideas:

- Creating a shared vision
- Communicating that vision to others

- Finding allies
- Increasing driving forces
- Decreasing resisting forces
- Celebrating wins—big and small
- Recognizing the importance of the individual

Strategic planning can be an effective tool to accomplish the task of organizational change. It is often helpful to have an objective ‘outsider’ to facilitate discussions about where we are and where we want to be.

The strategic planning process is really quite simple. It involves beginning with the end in mind. It involves considering the following questions:

Who are we? What is our mission? What is our vision? What do we value? What makes us unique?

Where are we now? What are our strengths? What are our weaknesses? What opportunities exist? What threats exist for us?

Where are we going? Do we need to change? Does where we are now and what we are doing match who we are?

How will we get there? What are our goals? Objectives? What activities will take us toward those goals? Who will be responsible for what?

How will we know when we are there? What template do we hold up as the vision? How will we measure and evaluate our progress? What will our stakeholders be saying? Doing?

The Importance of Vision

The need to have a clear picture of where we are headed seems to be hardwired into us. In fact, many examples of this basic biological phenomenon can be seen in nature. One illustration of this can be seen in the butterfly, *Pieris virginensis*. A group of ecologists were studying how this species of butterfly identifies its host plant. They did two experiments. In the first, they placed a leaf of the host plant on one end of a box and a leaf of another plant on the other end. The larvae of this butterfly were released in the box. They traveled randomly about half ending up at the host plant and the other half at the other plant. Eventually they all ended up at the host plant. In the second experiment, they placed the leaf of the host plant flat in the box and the other leaf upright on a stick. This time all of the larvae traveled toward the non-host plant first. It was apparent from the experiment that the larvae are in search of “uprightness.” They are genetically wired to do so. We, too, need to have a vision or template to guide us in our work. We propose the principles of universal design and culturally affirmative environments as a template to guide our work. Therefore, one of the goals of this discussion is to establish a clearer vision—to think about what it will look like if we are successful in our work. We’ll begin with an effort to establish some shared language.

Pathological vs. Cultural View of Deafness

Professionals who work with the Deaf community will be very familiar with the comparison between the pathological view of deafness as compared to the cultural view. Those who view deafness through a pathological perspective see deafness as a deficiency. They are likely to think of it as a problem to be ‘fixed.’ Those who view deafness from the cultural perspective are likely to see being deaf as a difference, as an aspect of diversity. They are likely to understand Deaf pride

and to see American Sign Language as equal to any spoken language. They are likely to recognize the Deaf Community as having its own culture and rich history.

Medical Model vs. Social Model of Disability

Similarly, there are views of disability that frame it in different ways. These frames are sometimes referred to as the Medical Model of Disability and the Social Model of Disability. In the Medical Model, being disabled is seen as negative. Disability resides in the individual. Remedy or cure is the normalization of the individual. The agent of remedy is the professional who affects the arrangements between the individual and society.

By contrast, the Social Model frames disability as a difference—an aspect of a person’s diversity, just like race or sexual orientation. It’s just a part of who you are, with no value judgments attached. Being disabled, in itself, is neutral. In the Social Model, disability does not reside in the individual at all. Disability comes from the barriers in our environment. The remedy in the social model is a change in the interaction between the individual and society. The remedy is designing environments to be accessible for everyone. The agent of remedy can be the individual, an advocate, or anyone who affects the arrangements between the individual and society.

This has enormous implications for how we approach what we do. Rather than us being the gatekeepers for individual accommodations and services for students with disabilities, our focus must shift to changing our campus environments for the better. And anyone can be involved in that process.

Accommodations versus Universal Design

Many campuses are beginning to provide resources and training on universal design. In most instances, disability resource professionals are looking across the campus at instruction and information technology environments and considering how universal design might be implemented. More recently, many of us are realizing that we need to take a closer look at our own practices. When we respond to an environmental barrier with an accommodation, we need to consider the implications of that response.

Accommodations are needed when environments are not universally designed. In the accommodations model, access is a problem for the individual with a disability, and should be addressed by that person and disability services. Access requires that accommodations are made, or existing requirements are retrofitted. Access is retroactive in nature. Access is often provided in a separate location or through special treatment. And finally, access must be reconsidered each time a new individual uses the system.

By making the paradigm shift to universal design, we see that access issues stem from inaccessible or poorly designed environments and should be addressed by the designer. All systems and environments should be designed, to the greatest extent possible, to be usable by all. Access is proactive in nature, and is inclusive. Access, as part of the environmental design, is sustainable.

So if we all stop and think about what we do, especially those of us that work on college campuses, we can see that we are at times a part of the problem. The typical scenario is that the student comes in because they are registered in classes that present barriers and we respond by focusing on what they need to gain access to the material or activity. Whatever the barrier might be, we brainstorm and fix it or find a work-around. That is the accommodation model. By looking through our new lens, we realize that we should see accommodation requests as signposts that something in the environment needs to be changed—that there is something in the design of the environment that is problematic. Once that change takes place, students will not have to ask for that individual

accommodation again. We can work proactively rather than reactively. When we fail to change the environment to be more accessible, we are creating the need for accommodations in the student. We are part of the problem, and not part of the solution.

What is Universal Design?

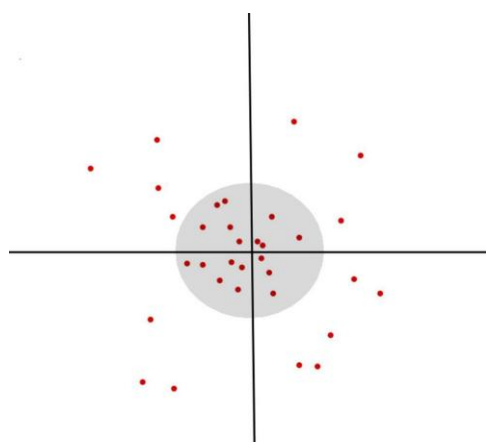
Universal design is a conceptual framework for designing and developing inclusive environments. It stems from the attitude that environments are disabling to individuals and that they could be designed in ways that are usable by a majority of people with a variety of personal differences. Universal design reframes the concept of accessibility from “special features for a few” to “good design for many.”

Ron Mace, who coined the term ‘Universal Design,’ said: Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Universal Design utilizes the following principles:

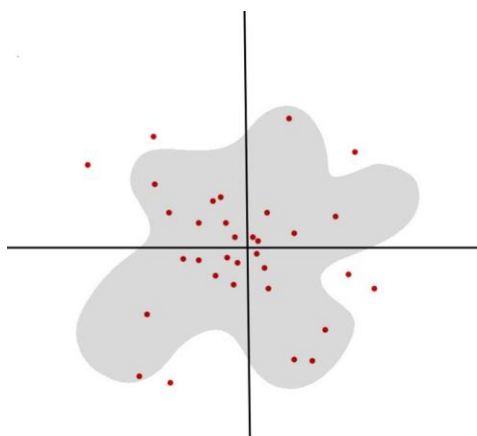
- Equitable use
- Flexibility in use
- Simple and intuitive use
- Perceptible information
- Tolerance for error
- Low physical effort
- Size and space for approach and use

The philosophy challenges us to think in new ways—to anticipate the variety of settings and conditions in which people perform a task or use an object...



Traditional Approach

... and then to design the process, course, or object with those diverse possibilities in mind.



Universal Design Approach

These illustrations might represent the instructor's teaching style (the grey shape), and the various learning styles of students in her class (the red dots). When information is presented in one way, for instance, lecturing, it is not effective for many students in the class. When the professor anticipates diversity in her students and therefore designs her class to meet all the needs she might encounter, then more students will benefit. Rather than only lecturing, she could also encourage small group activities, incorporate interactive projects, and use teaching methods that benefit auditory learners and kinesthetic learners. By designing her class in this way, with the goal of making it effective for the greatest number of students, she creates an environment in the class that is inclusive and affirming. In addition, she eliminates the need for many accommodations.

As an example, consider the issue of notetaking. Most universities have a process for recruiting notetakers. It often involves the student, perhaps a deaf or hard of hearing student, bringing a flyer from the Disabilities Office to the professor. The professor announces that a student with a disability is in need of a notetaker, and works to facilitate that process. This is a process that is repeated each and every time this student takes a class.

A way to approach this using the principles of universal design would be for the professor to post her notes to the online course shell for all students to use. Another approach would be for students in the class to take turns as notetaker for the entire class, and for those notes to be posted every day. This would eliminate the need for the deaf or hard of hearing student to request the accommodation. And doing so makes the class more universally designed. Those posted notes will benefit not only the student with a disability, but also international students in the class, students from academically at-risk groups, and students whose learning style differs from the teaching style of the instructor. This also keeps the disabled student from experiencing the whole 'separate but equal' situation. Everyone benefits from this approach, and a separate process doesn't have to be utilized for the deaf student. It's truly win/win for everyone involved.

Envisioning Change: The AnyTown Model

The authors have developed an approach for creating a shared vision that has been effective with audiences that represent various institutions. Since creative brainstorming and dialogue is often inhibited by the differences between campus environments, the authors invite participants to engage in an envisioning process that suspends that reality for a time. Participants are asked to become members of the AnyTown University campus community. They adopt a new identity by taking a nametag that identifies them as a member of this community with a fictional name.

This activity follows an in-depth discussion of the social model of disability and universal design. The prompt that participants are given initially is worded as follows: “You are invited to spend some time at AnyTown University where you can leave your own institution for a while and work together toward a common goal. Participants who are committed to the values of inclusion and universal design are invited to share ideas and begin the work of opening minds and changing the culture here at AnyTown U. and in our community.”

Typically, without prompting, participants also take on the role of a stakeholder on their campus—a faculty member, a dean, a student. This approach seems to effectively enable participants to step out of the confines of their institutions, and their perceptions that change will be difficult or impossible, and to immerse themselves in the possibilities, rather than the limitations.

To set the tone for this more interactive portion of the session, facilitators show a series of slides with quotes related to social justice and change. Those quotes are provided in *Appendix A*.

Facilitators then open the discussion by explaining their roles as facilitators as if they are members of the AnyTown campus community as well. The strategic planning process is driven by a series of questions:

- How will AnyTown University be different when we achieve our vision of universal design?
 - How will we think about “disability?”
 - What will the experience be like for students with disabilities?
 - What will attitudes be like?
 - How will students/staff with disabilities be viewed?
 - Who will be responsible for access?
 - How might the role of the DS office change?
- What are the barriers to change? What might our resisters be saying? How might we respond?

The facilitators then introduce some values for consideration and discuss whether or not these reflect the values of our profession:

- Disability is an aspect of diversity that is an integral part of society.
- Being disabled is, in and of itself, neutral (Gill).
- Disability is a social construct resulting from the present inability of social institutions and designed environments to accommodate individual differences (Schriner & Scotch).
- Access is a matter of social justice.
- Good design means, among other things, that a product, process, or environment is, to the greatest extent possible, usable by everyone.
- An approach requiring retroactive adjustments to be made on an individual, case-by-case basis is not sustainable.
- Creating and advocating for usable, sustainable, and inclusive learning environments is a shared responsibility.
- When a product, process, or environment is not usable, the designer of that process becomes our client—not the person with a disability.
- Group identification is a healthy response to disability.

Typically, participants are able to agree with these values with only minor alterations. Facilitators then move into another level of questioning:

- Are our current practices supporting our vision? Are they consistent with our values?
- What messages do our current practices send to others?
- How can we ensure that our approach and departmental procedures reflect current thinking about disability to affect organizational change?

- What changes can we implement right away?
- What should we do more of? What should we do less of?

Participants often identify several practices as being out of sync with the stated values. Language is often one of the many problem areas identified. Several activities might follow this discussion. One example is to look together at a sample mission statement and consider the language that is problematic. Here is an example of a mission statement that reflects old thinking about disability:

The mission of the Office of Special Student Services is to eliminate physical and academic barriers and to fulfill the concept of assisting students in achieving their educational, career, and personal goals through the full range of institutional and community resources. In addition, the office was established to insure that students with special needs receive support services and accommodations to allow them equal access to all AnyTown University programs, and with our assistance they have the opportunity to realize their potential and succeed in their academic pursuits.

Taking the discussion from the abstract to the tangible seems to be helpful to participants and provides a good transition into the activities that follow. Facilitators end the AnyTown activity and debrief participants about that process, asking what about it was helpful and what about it was frustrating or limiting.

Taking the Vision Home

The authors find it important to provide an opportunity for participants to spend some time beginning to apply the principles and paradigm discussed in an even more tangible way. Depending upon the time available, participants may be asked to work on their own mission statements, syllabus statements, or letters to faculty. At times, facilitators instead provide samples for participants that need to be changed to reflect new thinking about disability. Finally, participants are encouraged to commit to making at least three changes once they return to their own campus.

Conclusion and Recommendations

As stated in the opening remarks, many disability resource providers see the value in the concept of universal design and social model of disability but are uncertain about how to make change happen at their university. The message that the authors want to send is that when professionals focus on implementing changes in their immediate area of influence, those changes send a powerful message across the campus. At the University of Arkansas at Little Rock, initial attempts to implement universal design began with a focus on faculty. We found that approach alone is not sustainable. A more systemic approach was needed. The focus on making changes in the way the Disability Resource Center approaches its work, has provided opportunities to move the campus toward a model of universal design through everyday interactions with faculty, staff and administrators, rather than just an occasional opportunity to engage a small number of faculty in professional development activities.

Finally, we suggest that the AnyTown activity provides a model that can be emulated on individual campuses. This particular activity was developed to bring people together who represent a variety of campuses. One might adapt this activity in order to begin a creative process of dialogue within one's department or among allies on a given campus. When the authors have worked with staff from the same institution or agency, they have instead suggested that staff take on roles of other stakeholders or people who are impacted by what they do. Staff in a Disability Resource office might, for example, take on the perspective of faculty, administrators or students as they consider re-envisioning and reinventing the office culture and structure. Regardless of the approach taken,

the authors challenge professionals in the field to take the time to set aside “business as usual” and consider their language, office culture, structure and practices through the lens of social model of disability and universal design. (For information on how the University of Arkansas at Little Rock has approached this task, see the proceedings from the PEPNet 2008 Conference entitled *Shift Happens.*)

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Appendix A

Freedom doesn't come with a piece of paper. A piece of paper doesn't end a long history of intentional and purposeful discrimination. Ignorance is our greatest enemy... excluding someone from society simply because of disability is WRONG.

~ Bill Clinton

A law cannot guarantee what a culture will not give.

~ Mary Johnson, Editor of *Ragged Edge Online*

Injustice anywhere is a threat to justice everywhere.

~ Dr. Martin Luther King Jr.

Now is the time for all of us to take our power back and become, each of us, Extreme Leaders in our own right. We have to set a new example of what’s right ...to be audacious enough to follow the examples we respect and challenge the ones we don’t.

~ Steve Farber, *The Radical Leap*

Three different responses to change:

- *Those who let it happen*
- *Those who make it happen*
- *Those who wonder what happened?!*
~ Anonymous

We can do anything we want to if we stick to it long enough.
~ Helen Keller

We must not, in trying to think about how we can make a big difference, ignore the small daily differences we can make.
~ Marian Wright Edelman

If you ever think we are too small to make a difference, try spending the night cooped up with a mosquito.
~ Swahili proverb

There is a simple way to package information that, under the right circumstances, can make it irresistible. All you have to do is find it.
~ Malcolm Gladwell *The Tipping Point*

... the channel with the greatest influence in America is neither the traditional media of tv, radio, or print advertising nor the new medium of the World Wide Web but the "human" channel of individual, person-to-person, word-of-mouth.
~ Ed Keller and Jon Berry, *The Influentials*

Nothing great was ever achieved without enthusiasm.
~ Ralph Waldo Emerson

If the shoe doesn't fit, must we change the foot?
~ Gloria Steinem

Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.
~ Margaret Mead

Be the change you want to see in the world.
~ Mahatma Gandhi

If we are to achieve a richer culture, rich in contrasting values, we must recognize the whole gamut of human potentialities, and so weave a less arbitrary social fabric, one in which each diverse human gift will find a fitting place.
~ Margaret Mead

Education is the most powerful weapon which you can use to change the world.
~ Nelson Mandela

LEADERSHIP

Creating a Mentoring Program for Speech-to-Text Services

Kim Thiessen & Brian Buma

Abstract

Mentoring is, in effect, an effort to decrease the learning curve for pre-professionals (speech-to-text providers with little or no experience), putting more qualified service providers into classrooms in a shorter period of time, and ultimately to give clients the best service possible. Pre-professionals have a difficult time in what many consider to be a very intense situation, with extensive responsibilities, a fast flow of information, and a physical skill requirement which may, or may not, be attained prior to going into an actual classroom. To counter that pressure, and to ensure better services for the clients, a mentor (professional transcriber with training in mentoring techniques) can serve as a one-on-one educative resource for the pre-professional, answering questions, sharing tips and techniques, providing moral support, and functioning as a liaison between the pre-professional and the site administrator if necessary. This article attempts to illustrate what one program, at Western Washington University, has developed in an attempt to create an optimal mentoring system for new hires. Not everything in the following material will apply to all programs, and some programs will undoubtedly need additional preparation and plans. While there will be differences between programs and locations based on different site policies and the particular service being provided, a mentoring program will greatly ease the transition from “pre-professional” into “professional service provider,” and ultimately improve quality of service. At the end, a sample order of mentoring priorities is presented.



Introduction

Mentoring, in the sense that will be used throughout the article, is an attempt to create a productive learning relationship between new speech-to-text providers (the pre-professional) and experienced professional service providers. The goal of the relationship is fostering better service faster, turning the pre-professional into an experienced service provider in a timelier manner. Ultimately, this means a higher standard of service to the students. While it is possible that these relationships will occur naturally, the mentoring program described here is an attempt to formalize and standardize the methods of mentoring at one university, extending the benefits to every new service provider. Mentoring is explicitly *not* teaching; professionals are not meant to didactically impart knowledge in this system. Mentoring is more of a guided process of self-exploration and analysis, with the professionals' main role found in probing questions and critical analysis. At times, the mentoring

relationship might lean more towards the teaching arena, especially with physical skills, tips, and techniques, but the central role of mentoring is guiding, not direct instruction.

It is extremely important to realize that good mentors are made, not born. It is not sufficient to simply be an experienced, capable service provider; training in good mentoring techniques is a prerequisite to good mentoring. We do not simply send physics professors into a high school classroom, nor should we. Teaching requires a specific skill set which is quite independent of the subject material. This is why even competent mathematicians must learn to communicate to a classroom to be an effective teacher. Many people have experienced a brilliant professor with little to no “people skills,” and the experience is rarely positive. Often, those teachers leave their students in a muddle because they are unable to articulate what, at this point in their careers, comes naturally. To the student, the result is either overwhelming or incomprehensible.

At Western Washington University (WWU), we learned these lessons first-hand. Our early attempts at a mentoring program met with scattered success. Those professionals with teaching experience often reported good gains, and the pre-professionals grew faster than they would otherwise. Unfortunately, we also had professionals functioning as mentors who were very talented at service provision but lacking any formal teaching experience. The pre-professionals working with these individuals were often frustrated or bewildered, wondering what they were supposed to be getting out of the mentoring experience. While working with these “non-trained” professionals certainly didn’t hurt their development, the experience did not result in any gains, and did take valuable time.

Mentoring the Mentors

We find it vital to engage in a pre-mentoring “professional training” program for the future mentors. We emphasize the importance of learning to mentor, thinking of mentoring as a technique, not a job shadow or passive experience. Administrators bear the brunt of this particular responsibility. Each professional has a different skill set (and skill deficits), which should and must be addressed prior to setting up a mentoring situation with a pre-professional.

Western Washington University uses its own testing system to first determine, objectively, the skill level of the professional. Only those that reach the highest level of ability qualify. This can exclude some otherwise excellent mentor candidates, but also ensures that each mentor will also model excellent service provision, not just adequate service provision. After this initial screen, the administrator must provide instruction in “the art of mentoring.” Undoubtedly different site administrators will approach this in different ways, and each professional will have her own personal style of mentoring. This is to be expected and is perfectly acceptable. In fact, one of the major strengths of mentoring is the individualized attention each new hire gets to aid her professional growth. In the end, the professional should feel equipped to adequately guide the pre-professional in his journey towards becoming a professional service provider by whatever path necessary. More on the responsibilities of the mentor are found in the following sections, as well as some techniques for new mentors to use.

The site administrator needs to assign professionals and pre-professionals together, on the basis of both personality compatibility (to the extent that is possible) and available times. In our experience, mentoring is most effective if done immediately following a class in which both the professional and the pre-professional are working (i.e. class from 10:00 to 11:00 AM, mentoring from 11:00 to 12:00). Mentoring done later in the day or week is still of value, but the benefits of immediate feedback are lost. This means two service providers in the same classroom, “teaming” the class. While more expensive in terms of man-hours, we’ve found that mentoring when the mentor and the pre-professional do not share a class is of little value.

Mentoring as a Process

Mentoring, in this program, is not an evaluative program in the traditional sense; there is no benchmark the pre-professional needs to achieve before “passing” (although there is certainly some informal, formative evaluation ongoing throughout the process). WWU uses a more relational approach, preferring to let the pre-professional guide the conversation. If there are any ethical concerns, procedural issues, or new techniques to learn, the pre-professional should ask. In our experience, most of the questions come from situations arising in class: “What should I have done there,” or “Would it have been better to...” Sometimes, however, the pre-professional isn’t even equipped to ask the right question. During the mentor training, the professional is taught to use leading questions, evoking thoughtful responses from the pre-professional and hopefully causing some self-exploration. While we prefer the mentoring relationship to be learner-guided, there are some general pathways and skill progressions that we have found common across all new hires, and therefore we have developed a “curriculum” for mentors to use if needed, listed at the end of this article.

The professional must be aware of several things if he is to provide a good service to the pre-professional. First, the professional needs to remember the stresses of being a new service provider—some will, some won’t. Often times a mentoring session might be nothing but a 50-minute encouragement seminar. That ties in with the second vital piece of mentoring – direct praise and criticism. Untrained professionals tend to notice only the negatives when evaluating somebody, because the good things are assumed (“Well, of course you did that right, that’s your job!”). To a new service provider, however, those good things must be pointed out specifically. Likewise, the mentor should focus on only one or two things which need improvement, and use precise vocabulary when describing those behaviors. A simple “That was good” and “That was bad” is not sufficient for the pre-professional to learn. Overwhelming a pre-professional is of little value, and likely to cause more burnout than progress. The mentor needs to be open and transparent about his own short-comings as well, modeling appropriate behaviors in the classroom. This means assessing what could have been done better, even if (especially if) the professional was responsible.

The underlying goal of a mentor’s action is creating a meta-awareness inside the pre-professional; the new service provider needs the skill of *self-analysis*, knowing what she did and how to improve. Self-criticism, but not self-abuse, is a difficult skill to learn; the mentoring relationship should model that behavior. Once the pre-professional can take on responsibility for her own growth and skill development, and the resultant independence, she will be ready to go out on her own. By no means is she ready to be a mentor herself, of course. Rather, the professional slowly fades out of the picture as the pre-professional assumes more and more of the responsibilities for good service provision, including self-critique, assessment, and problem solving.

The Pre-Professional

The role of the pre-professional must not be lost in all the preparation of the mentor; indeed, a willing learner is required for any progress to be made. The new hire needs to be comfortable asking questions, probing for better methods, asking “Is there a better way to do that?” and thinking about his own performance in critical ways. Not only that, the pre-professional must be willing to stretch himself and avoid fostering dependency on the mentor for support or encouragement. The site administrator must make this clear at the outset, so all expectations are clear. Mentoring exists for the pre-professional (and ultimately for the person receiving services), and should be treated as professional development by everyone concerned.

Sample Mentoring Program

While mentoring exists primarily as a pre-professional, learner-centered program, the mentor will also have the opportunity to guide the conversations and focus areas. If the pre-professional has no

immediate concerns, or does not know how to articulate any questions or skill related issues, the professional will need to take the lead as a “teacher.” While the traditional role of a teacher is explicitly not identified with the mentoring program, sometimes teaching techniques are useful. At WWU, we have tried several different approaches (and sequences) to teaching the various skills required for excellent speech-to-text service provision, and have created the following standard curriculum based on the needs we see most commonly in new employees. While it is designed around meaning-for-meaning speech-to-text services (Typewell specifically), the general layout and order of priorities are potentially transferable to other services. It is also vital to remember that mentoring is individualized (indeed, that is the main strength) and therefore realities of mentoring, on a person-to-person basis, may differ. This list describes how and why we teach specific skills in the particular order we do. Everything is, as always, designed with the best possible service provision to the student in mind, and presumes that the mentor and pre-professional are working together, in real service, at least a few times a week.

Sample Curriculum

Order of Priorities:

- Professionalism
- Readability – spelling/proper expansion
- Readability – grammar
- Chunking
- Completeness
- Readability – phrasing
- Editing
- Professionalism/Dealing with teachers
- Equipment Issues

Justification of Each

Professionalism: Service providers frequently come across unplanned and new situations for which there has been no specific training. Dealing with those situations requires a student-centered mindset, confidence and assertiveness, and knowledge of the general guidelines and policies of the site. These need to be practiced, if possible, even before the pre-professional gets into the classroom because even in a mentoring situation unexpected situations might occur where the pre-professional may need to take on full service provider responsibilities on her own.

A second vital skill associated with professionalism, and which could potentially need to be addressed at this stage, is self-analysis. Professionals constantly need to evaluate their performance in order to improve, and this is equally true, if not more so, for pre-professionals. Generating an awareness of both their internal thought processes and outputs will be necessary for pre-professionals to succeed in both the training and the job.

Readability – Spelling/Proper Expansion: The largest barrier towards an understandable transcript is spelling. Pre-professionals need to be near-perfect in properly spelling the correct word, and by extension, not spelling the wrong word (via mis-expansion). This skill will vary between incoming hires, some will be excellent spellers, some will not. These issues need to be addressed in class, by the team (preferably the hire acting as the mentor) for two reasons: First, the student needs to receive accurate information in class. Second, immediate correction of mistakes is more effective at preventing future mistakes than delayed feedback. If the pre-professional needs extra training, drills can be conducted for spelling, vocabulary words, or other issues.

Readability – Grammar: Commas, colons, dashes, and proper capitalization (among others) greatly increase readability and flow of ideas, even in poorly worded sentences. Once the pre-professional

is properly spelling words, he needs to arrange them in a grammatical fashion. Again, this issue should be addressed in class, immediately, for the same reasons as listed before; poor pronoun use, for example, is the second most common complaint from consumers. Grammar drills can also be conducted if necessary.

Chunking: Chunking is the true essence of “meaning-for-meaning” service provision, and a difficult step for pre-professionals to make. However, it is vital to address proper chunking relatively early in a training program, because reliance on speed (and therefore more word-for-word transcription) will only develop bad habits. Proper chunking decreases the necessary word count and allows for the inclusion of more ideas in the same length of time. A good chunking technique is vital for readability as well, because written language is far different from the spoken language; to provide equal communication access, professionals must translate between the two. This requires mental effort, not just good typing technique, and therefore takes time. Proper chunking will be addressed outside of class, with questions such as “How could you have typed this differently?” or “How do you think this reads to a Deaf individual?”

Completeness: Only at this point in the training does the pre-professional have the necessary skills to obtain 100% of the main points in a lecture. Prior to this, the team/mentor is most likely taking notes for inclusion later (during editing), which while necessary, is not preferable. At this point, the mentor should be able to move to in-class prompting, via whatever means the team finds most agreeable. This skill is vital for good teaming, and the pre-professional should be able to perform the same service for the mentor (if necessary).

Readability (phrasing): This skill is vital to a professional-looking transcription, and while difficult, is a distinguishing characteristic between a good hire and an excellent, certification-level hire. Awkward phrases and sentences need to be eliminated so the student need not spent time interpreting the transcript. Sentences should be transparent and quickly readable in class. This skill will be worked on outside of class so ample time is available for discussion of mental processing and techniques to ensure the best possible phrasing.

Editing (if applicable): Once the hire is performing adequately in class, editing can be discussed. Prior to this point, the mentor is performing all the editing duties (with or without the pre-professional’s help). At this stage, the pre-professional has the tools necessary to properly edit a transcript, and the mentor can aid the pre-professional with tips and techniques on the specifics of editing (proper order of editing priorities, site-specific policies, etc).

Professionalism (dealing with teachers): Throughout the training, issues with instructors will likely have come up, and so the pre-professional will have seen the mentor deal appropriately with those situations. Ideally, the pre-professional has taken the lead in various situations in the classroom with the mentor serving as a backup/support role. As the mentoring period comes to an end, however, the pre-professional needs to be able to deal independently with those situations, and so time must be spent dealing with specific questions, site-specific policies, and whatever else is necessary to properly equip a pre-professional to deal with instructors on her own.

Equipment: In the same vein as the previous section, the pre-professional needs to be confident in his ability to handle equipment malfunctions, problems, and situations, such as linking issues. Since this requires some technical experience, not all hires will be immediately comfortable with the instruction; however it is vital for any hire who will be working independently. Depending on site policies and service-specific equipment, the pre-professional should be given the tools required to deal with unforeseen situations as they arise.

Specific Techniques for Mentoring

Professionalism: Role-playing situations are excellent ways to get pre-professionals into the proper mindset, and while they can't simulate a classroom exactly, stimulating questions like, "A professor addresses you in class, asking you not to transcribe some vulgar joke he is about to make, what do you do?" can get pre-professionals at least considering the variety of situations they will experience in the classroom.

Readability – Spelling/Proper Expansion: While most training programs will ideally cover proper spelling, expansion, or any other skills specific to the type of service being provided, it is highly likely that pre-professionals will be deficient in some areas, and therefore intensive practice should be provided on an individual needs basis. Drills, practice transcripts, and video practice are all useful. If the anticipated content in a future class appears to be a difficulty, attending a similar class, finding documentaries on the same subject, or reading a preparatory book on the content would also be useful in mastering the vocabulary which will likely be a problem.

Readability – Grammar: Grammar is a skill which, depending on the pre-professional's background, may require practice. Worksheets, drills, and intensive analysis of the pre-professionals work are all valuable in both seeing what improper grammar looks like and developing a sense of the best way to word a given statement according to grammatical rules. Books like *Eats Shoots and Leaves* by Lynne Truss and the online Purdue writing center (<http://owl.english.purdue.edu/>) could be useful as well.

Chunking: Most universities have a video library with collections of videotape or DVD lectures available to students and staff. Using these actual lectures simulates a classroom situation far better than typing a documentary or other television show, and allows the pre-professional the freedom to pause, rewind, and otherwise self-analyze her work for the best modes and options for chunking available.

Completeness: There is little substitute for completeness training beyond practice, practice, and more practice. Videos of lectures and in-class time are the most important contributors to the pre-professionals success in this area.

Readability (phrasing): Sets of sentences to reword for practice are very useful from a meta-analysis standpoint. An intensive, critical look at the pre-professionals work will be helpful in getting the pre-professional to look at his work in the light of "When the student reads this, how will she understand it?"

Editing: Many editing policies (if there is any editing of the transcript at all) are site specific, and therefore training techniques will necessarily be individualized to the specific location. Some general ideas, however, include using simulated transcripts with single-error types of mistakes (only grammar errors, only spelling errors, only formatting errors, etc) to focus on a particular kind of correction, examples of real transcripts (before/after), and intensive focus on small sections of the transcript with a "How would the student read this passage?" mentality.

Professionalism (dealing with teachers): In terms of direct instruction, the pre-professional can practice hypothetical situations as set up in either a discussion or a role-playing situation by the mentor. In the classroom, the mentor can place responsibility on the pre-professional by saying, "If something comes up, you handle it." Even if nothing happens, there is some benefit to putting the pre-professional in that mindset – she will anticipate possible responses while in class, a valuable practice.

Equipment. Obviously equipment issues are related specifically to the type of service and the institutional policies. Instructions for setting up linking, repairing linking problems, perhaps a checklist of things to look at when computers fail to link, and other instructions can be useful reference material. In addition, the mentor could purposely “break” the equipment so the pre-professional has a chance to attempt a fix in a controlled environment.

Conclusion

The mentoring program should provide a faster route to an experienced service provider than a new hire could achieve on her or his own. Rather than learning all lessons the hard way, a mentor can encourage, guide, and aid the pre-professional through the process. Often, in places without a formal mentoring program, this role is filled (sometimes consciously, sometimes not) by the site administrator. The professional mentor allows for direct instruction and advice, in the classroom, in real time – a convenience that a site administrator, with all her other duties, simply cannot match. A professional mentor can also identify directly with the pre-professional, and aid his growth in an individualized manner. It must be remembered, however, that experience is no substitute for training when it comes to effective mentoring. Mentoring is an art, and basic teaching techniques must be learned. When creating a mentoring program, the site administrator must first train the mentors.

While a basic curricula has been presented, the strength of mentoring lies in its learner-centered approach. If there are questions or concerns raised by the pre-professional, those should be addressed; an atmosphere of constructive self-criticism must be encouraged. The “teaching” aspect of mentoring should only be used in absence of any pre-professional questions or concerns. When implementing a mentoring program, everyone must treat it as professional development, a tool to create better service providers in a timelier manner. Given enthusiasm from all participants, a willing attitude to learn (from both the professional and the pre-professional), and a site administrator committed to the mentoring idea, better service provision should result.

Continuing Education for Speech-to-Text Providers: A Fundamental Piece of the Puzzle

Jennie Bourgeois & Judy Colwell

Abstract

One of the most important pieces of the "high-quality speech-to-text service puzzle" is on-going skill development, for both service providers and supervisors overseeing service delivery programs. The Speech-to-Text Services Network (STSN) has made the on-going skill development of those in the speech-to-text community one of its primary missions. This presentation provided details about the STSN Continuing Education Project, including the Professional Development Recognition Program. It also demonstrated several of the "remote" learning tools developed by STSN. These include an on-line tool for service provider skill enhancement, which includes audio practice materials, self-journaling/feedback forms, and progress tracking forms. Audience participants had the opportunity to work with one of these continuing education tools.



Providing Continuing Education Opportunities

Continuing education for speech to text providers is a primary focus of STSN, the Speech to Text Services Network. So, why is continuing education good? For one thing, it helps individuals to grow, and it helps to grow our profession. Who of you who have background or familiarity with the Registry of Interpreters for the Deaf (RID)? Almost everybody in here. Continuing education is one of the foundations of RID—to help interpreters to grow, develop, and mature in their profession and to help move the profession forward. That's the same model that we're trying to move forward with STSN: we in the speech-to text-field need much more than just the initial training, whether it be for CART, C-Print, or TypeWell.

Continuing education is also important for motivation. Whenever we participate in training and come to presentations like this, it's motivating. For those of you who are service providers, when you go to conferences like this, we hope you go away recharged or more integrated. We also hope that you use the new technologies or ideas you picked up from workshops and networking with others. Continuing education motivates us to move forward.

Continuing education gives recognition to the profession. Whenever we start advertising upcoming workshops, people start questioning, "What is this about exactly?" It gives recognition to us as professionals; it shows that we are interested in the profession and the STSN organization, as well as ourselves as individuals.

In general, when you think about training, you think about conferences and workshops. However, although we emphasize participating in conferences and workshops, there also are other avenues to get continuing education.

There were many speech-to-text presentations at the PEPNet conference. For those people unable to attend those sessions, the conference proceedings will be available online later this year.

Other workshops are happening, too. In June 2008, the National Center on Deafness will have several speech-to-text sessions at their Summer Institute in Northridge, California. There will be an Advanced TypeWell training in Fall 2008 in the New York City area. The Western Network of Communication Access Providers (WNCAP) will have a conference in Spring of 2009; for more information, go to the wncap.net website.

Some workshops cover skills in specific types of services, such as TypeWell, C-Print, and CART. Within STSN, we strongly promote workshops that are applicable to all service providers, regardless of what mode of speech-to-text services they use. Some of the issues covered include time management and business ethics; however, addressing technology training may or may not be specific to the type of service provided. C-Print and TypeWell service providers use laptop computers, and both of groups need to know general technology, networking, and related issues. Other important areas include writing skills, English grammar, syntax, and proper punctuation.

Working on a “Grassroots” Level

Within STSN, we also promote "grassroots" continuing education activities, in response to the difficulty many people currently have traveling to conferences. One problem people face is money issues. Another issue is that flying these days is awful. Therefore, one way for people to get continuing education is to offer it in their local areas.

One example of this is a conference that happened recently in Knoxville. The University of Tennessee, Knoxville (UTK) hosted a cognitive processing workshop for both interpreters and speech-to-text service providers. It was presented by a local Knoxville woman. It was a great example of reaching out to experts in a local area. It's not just the content from the podium that's presented—it's the opportunity to network with colleagues.

Another example is the Western Network of Communication Access Providers (WNCAP) model. It was established by staff at five colleges in the Oregon and Washington area who offered speech-to-text services. They understood that those people needed and wanted continuing education, and they created opportunities to get together. Portland Community College donated or provided the space for the conferences in 2005, 2006 and 2007. There will be another WNCAP conference in Spring 2009.

Planning an Activity

How can you plan and host a grassroots conference? What is offered at a conference like this besides a keynote address? People who are already instructors and used to teaching gave presentations on various topics. There were sessions on ethics and ergonomics, as well as skill-building opportunities for both C-Print and TypeWell service providers. Service providers also can give presentations, because service providers who are experienced at doing this job are a rich resource.

Another interesting session is to provide a consumer panel. At a past conference, we had three people on the panel—each consumer used a different type of service and each had his/her preferred service provided as access during the panel discussion.

In the series of WNCAP workshops, we felt it was important to demonstrate the idea of not having competition among the types of services. That's not what this profession and these grassroots events are all about. It's about the consumers. Different services for different people. But we all need to know about each other, and we can learn from each other.

WNCAP conferences have included sessions relevant to all service types. For example, there was a CART writer who presented on different theories of CART writing. C-Print and TypeWell professionals went to that session because everybody wants to know what the other guy's doing. We also had a demonstration by three people: one providing TypeWell, one providing C-Print, another one providing CART. Conference participants could walk around and see the different services. That was a very well-liked opportunity for conference attendees.

We encourage you to set up your own "grassroots" workshop, using either the UTK "one presenter" model, or the WNCAP "multiple presenters" model. To help you do that, there is a handout that can be downloaded from the Continuing Education link of the STSN website. This file provides a timeline of things that you have to do to plan and put on a grassroots workshop.

What are some possible funding resources? Consider contacting your PEPNet regional representative. Because ongoing professional development is an important service provided by PEPNet, there may be some interest in working together to address training needs. Although PEPNet funds may not cover the entire cost of the activity, it may help to get this started. A nominal registration fee might be charged to cover other costs.

In addition to PEPNet, STSN is another group that is working to set up regional workshops, with the goal of having regional workshops available in different areas. Shannon Aylesworth is the current STSN president. Within the next two years, STSN would like to support two to four workshops. Although STSN might not be able to provide much financial support, it is an excellent resource for helping to organize an activity.

In planning a continuing education activity, think about where and when it will occur. To decide *where*, think about how many people you want. One strategy is to limit the initial event to a specific number of people. Make sure that the venue selected can handle that many. Locating a site for 30-40 people is much easier than locating a site for a conference as large as the PEPNet conference!

Next is deciding when the event will occur. Remember that service providers need to be in the classroom and their supervisors need to be at work. Weekend workshops often work well; however, if people are traveling long distances, consider the impact on their schedule. It's difficult to travel for only one day, and it's also important to return home early enough on Sunday night to be ready for work the next day.

The next issue is to plan for the *what* and the *who* of the presentations. Let the needs of the audience guide the planning process. For WNCAP, we asked the service providers in the area, "What do you want to know about?" Along with the *what* is the *who*. Consider whether or not you will pay the presenters. Some presenters—really great presenters you'd want to invite—will require travel and other fees. It may be necessary to look into other funding sources.

You also need to plan for *how* to do the event. It may be necessary to get an event bank account and decide who's going to receive the checks. If you're working with an educational institution, such as UTK's workshop, the school might be willing to receive the checks and process payments.

But if you are a true grassroots group and not supported by a school, somebody needs to function as the business manager, set up the bank account, write checks, and handle other issues related to money.

Planning for interpreters and speech-to-text service providers and paying them is another important component. Advertising can be done by using the listservs, your institution's website, and other resources like that. It's important to reach out to as many people as you can to generate interest in the activity.

What should happen on the day of the event? One big thing people forget is good signage to tell people how to get from the parking lot to the meeting room. A registration table that's staffed all the time is necessary because people show up and want to register late. Plan for snacks and/or beverages during breaks; if it's an all-day event, consider what lunch options might be. Finally, prepare conference feedback forms for people to complete, and designate a place for them to be collected. Prepare attendance certificates, and schedule a time and place for those to be distributed.

Within a week after the activity, send thank you notes to people, the panel, the interpreters, and service providers. Appoint someone from the planning group to summarize and analyze the feedback sheets. By analyzing the feedback, you will learn what to do differently the next year.

There is a planning timeline that can be downloaded from the STSN website. In addition, STSN is creating an online repository to store presentations and workshops being done all over the country.

Professional Development Units

Because STSN values continuing education, we have established Professional Development Units (PDUs). It's a concept that is similar to Continuing Education Units (CEUs). These PDUs have been designed specifically for speech-to-text providers.

Why are we using the term "Professional Development Unit" instead of "Continuing Education Unit?" There are several reasons. The main reason is that STSN as an organization is not ready yet for CEUs. We don't have an organizational certification structure. Not all of the speech-to-text systems have their own certification available. We cannot make CEUs a requirement for members because there's not an instrument by which we can do so. More information about the Professional Development Project and related application forms can be access from the continuing education link of the STSN website.

How does someone accumulate PDUs? Currently, getting PDUs is voluntary, but they are only offered to STSN members. Send in the PDU form and supporting documentation to the Continuing Education chairperson for approval. As indicated in the previous paragraph, the form is online at STSN.org , under "Continuing Education." Prior approval is not needed, and recipients have up to six months after an activity to submit paperwork.

It's important to note that the activities do not have to be specific to speech-to-text services for a participant to accumulate PDUs. As discussed in other professional organizations, there often are other topics and issues that will benefit a speech-to-text provider. For example, workshops at the PEPNet conference on topics other than speech-to-text services are available for STSN PDUs.

Although attending a workshop in person is one way to accumulate PDUs, STSN also offers two self-study options. The first self-study option currently available is at the website <http://textcaptioning.com>. It is not necessary to be a member of STSN to use this online resource. This site is open to anyone.

There are many online resources that offer audio files that can be used for practice. However, not all audio files are presented at a good rate or offer good content for current speech-to-text providers to use as practice. Some have a lot of “dead air” that can be frustrating when trying to use it to increase speed or improve accuracy. To address this, we organized some audio files from a variety of sources. Using technical support, the files were run through an audio program so the speed was increased to a fast rate without distorting the sound. The “dead time” was removed so the files are just constant...and fast and difficult. These are not for your newbie trainees. They are for providers who are in the classroom, captioning/transcribing on a regular basis. These files are for people who need and want to challenge themselves and their skills. Your skills will not improve until you’re in more challenging situations.

The second option is an online PowerPoint that includes a question-and-answer activity. We took a presentation by Joyce Dworsky, Sharon Downs and Cindy Camp from the PEPNet 2006 conference and made it available online. Each presenter addressed a different topic. We included a companion piece with a list of questions. If you've done online self-study activities before, you're probably familiar with this kind of approach. Basically, information is presented in a specific format, such as a PowerPoint presentation; the materials include a list of questions that reflect the important points offered by the presenter. The questions are in multiple-choice format. In this particular activity, there are 20 questions. To receive PDUs for this activity, a completed response form and the PDU application must be sent to the STSN Continuing Education chairperson.

In addition to the two options described above, there also may be other opportunities. It’s possible that several topics offered by Signs of Development would be very applicable for the self-study option within STSN. Additional activities for PDUs will be considered on a case-by-case basis.

In summary, STSN is striving to make continuing education available all over the country – in cities and rural areas alike. It encourages personal growth, motivation, and improvement of skills. Go out there and help make this happen.

What Prisms Can Teach Us about Professionalism: Ethical Reflection and Refraction

Linda K. Stauffer & Amy Hebert

Abstract

Have you ever been faced with an ethical dilemma while interpreting and wondered how to go about making the best possible decision? The goal is to enhance interpreters' understanding of professional responsibility and increase their knowledge of models of professional ethical decision-making. Interpreters well versed in the Code of Professional Conduct and experienced in ethical decision-making can benefit from immediate, quick decision-making models. These models are not meant to replace sound ethical education, but rather, offer additional support for interpreters faced with unexpected ethical dilemmas. Addressed here are models including an abbreviated Humphrey-Alcorn Decision Making Model, the NAD-RID Code of Professional Conduct's "reasonable interpreter" standard, and other approaches such as: *What would my mentor say?* *What does my prior experience tell me?* and *Is my decision publicly defensible?*



Introduction

"What we see depends mainly on what we look for." ~ John Lubbock

Have you ever been faced with an ethical dilemma while interpreting and wondered how to go about making the best possible decision? Perhaps you mentally review the tenets of the Code of Professional Conduct (CPC). Maybe you remember a prior experience that was similar. Possibly you fervently wish you could remember what was discussed in your Interpreter Education program!

Ethics in the interpreting field reflect the field's values and provide a professional guide for behavior. The foundation for ethical behavior is respect. Dr. Sara Lawrence-Lightfoot of Harvard University, in a lecture on "respect" at the University of Arkansas at Little Rock, proposed that true respect has six dimensions: 1) it is empowering, 2) it is healing and leads to wholeness of the person, 3) it invites authentic communication and listening, 4) it comes from a true sense of curiosity; a genuine interest in what another thinks, feels and fears, 5) it requires self respect (which is gained by daily private vigilance), and 6) it requires one's attention to be "in the moment" (Lawrence-Lightfoot, S, 2000; Stauffer, 2001). Reflecting on the most highly ethical interpreters, it is clear these interpreters demonstrate a true respect for all individuals, but especially the consumers for whom they interpret.

Ethics, like prisms, can be viewed from different perspectives. Each perspective gives one a different view of the same thing. Ethical dilemmas can be viewed from various perspectives with decision outcomes influenced by the “lens” in which the dilemmas is viewed—much like prisms that both reflect (*to direct back*) and refract (*to bend and deflect*) light. Both new and seasoned interpreters need readily usable ways to apply the CPC tenets to ethical decision-making that consider self-reflection and application of decision-making models.

Ethical decision-making is something that has to be approached purposefully and exercised like any other skill. “Having a method for ethical decision-making is absolutely essential. When practiced regularly, the method becomes so familiar that we work through it automatically without consulting the specific steps” (Velasquez, Moberg, Meyer, Shanks, McLean, DeCosse, André, & Hanson, 1988, para. 14).

There are many resources and models for ethical decision-making and individuals are encouraged to explore these resources (Stewart & Witter-Merithew, 2006; Humphrey, 1999; Kidder, 1996). Unfortunately, an interpreter rarely has the luxury of stopping an assignment to check reference books, phone a friend, or otherwise consider how to make an ethical decision. If interpreters exercise their ethical “muscles” then it is easier to make sound, immediate professional ethical decisions.

All ethical models reflect the values underlying the professions’ values code. Interpreters must understand the underlying principle of the NAD-RID Code of Professional Conduct that states:

It is the obligation of every interpreter to exercise judgment, employ critical thinking, apply the benefits of practical experience, and reflect on past actions in the practice of their profession. The driving force behind the guiding principles is the notion that the *interpreter will do no harm*. (RID, 2005)

This requires each interpreter to bring critical analysis skills to each ethical decision. These skills are learned in the classroom, on the job, and through experience.

With that as a foundation, there are a few short models shared below that assist interpreters to view a situation from different perspectives. These models supports interpreters when ethical decision-making to arrive at an immediate, yet sound, decision. Why are these models necessary if interpreters consider themselves ethical people and are familiar with the field’s Code of Conduct? When faced with an ethical decision, people’s first thought to action typically comes from their personal value system and experience. Often these same individuals’ final decision for action will change drastically when a decision-making model is applied. Using one or more models for decision-making removes personal bias and places the field’s values and stated behavioral requirements squarely in front of the interpreter. This is how it should be. This provides quality decision-making and consistency across interpreters assuring consumers that practitioners are adhering to the field’s stated professional standards.

NAD-RID Code of Professional Conduct (CPC)

“Ethics set boundaries for professionals working in the field and provide guidelines between that which is allowable and that which is not.” ~ Esther de los Santos Rodriguez and Angel Reuguera Guerrero, Spain

When interpreters apply the CPC principles to their professional conduct, they must “...remember that their choices are governed by the *reasonable interpreter* standard. This standard represents the

hypothetical interpreter who is appropriately educated, informed, capable, aware of professional standards, and fair-minded” (RID, 2005).

A “reasonable” interpreter is one who has completed an interpreter education program, and is well versed in the profession’s standards. This interpreter has the knowledge, experience and sufficient skills to interpret in a variety of situations and for diverse consumers. This interpreter has a broad range of general knowledge including an understanding of current local, national and world events. The hypothetical “reasonable” interpreter understands basic ethical decision-making and has completed ethical studies. He or she is fair-minded; can objectively view situations from a variety of perspectives; can evaluate behavioral options, their outcomes and the impact on the consumers involved; and can discern the best course of ethical action.

Note that the description of a “reasonable” interpreter does not include the concept *unbiased*. It is said that interpreters are required to be “unbiased” when working professionally. Does this mean an interpreter *has no biases...* or... *is aware of their biases and can minimize the effects*? No one is without biases; however, if one is aware of their biases and the situations where personal bias may unduly and negatively influence the interpreted event, then the interpreter can make better decisions about accepting certain assignments and then monitor the influence of biases while working.

Personal moral values are also biases. Many people base the foundation of their lives on religious moral values. Is there a place in interpreters’ ethical decision-making process for personal or moral values? The short answer is “no.” If personal beliefs were the foundation for ethical decision-making, then there would be no need for a code of professional conduct. The Code is needed precisely because personal and moral beliefs differ and do not always reflect the field’s behavioral expectations. Without an expected standard for ALL interpreters to follow, there is no protection for consumers, interpreters, or the profession assuring each exactly what is expected without variation from interpreter to interpreter. Putting aside personal values (not getting rid of them) also allows interpreters to provide services to consumers in situations that vary from their own personal beliefs, such as a person of Christian faith interpreting a Jewish ceremony, or a straight interpreter providing services at a gay/lesbian event. One must remember that the interpreted event belongs to the consumers, not the interpreter. The interpreter’s personal values have no place here. In summary, interpreters are expected to suspend their personal beliefs and do what the profession requires.

With this understanding in mind, interpreters can ask themselves, “*What would a reasonable interpreter do in this situation?*” as a way to evaluate their options and arrive at an ethical and fair decision.

Humphrey-Alcorn Decision-Making Model (modified)

“It is not our abilities that show who we truly are, it is our choices.” ~ Albus Dumbledore

There are many models of ethical decision making readily available to interpreters via books and the internet. Within the field of interpreting, Humphrey (1999) reviewed several models or approaches to ethical decision-making. One such model is the 10-step Humphrey/Alcorn Decision-Making Model. This model can be modified to provide a guide for ethical decision-making on the job. With practice, these steps can become so familiar as to be almost automatic. Additionally, by using an ethical decision-making process, an interpreter can defend his/her decision should the need arise. Five abbreviated steps include:

1. *What facts/information do I have? Do I need more information before I am able to move ahead?*

Interpreters should evaluate the situation for what they know. Is there known history to this event or these consumers? What is the political or social context? Interpreters should also evaluate the need for additional information. Is there an unknown that would more clearly define the best decision?

2. What are the key ethical issues in the situation?

Is this an issue of confidentiality? Consumer respect? What exactly is the underlying ethical issue? It is much easier to evaluate alternative options and make ethical decisions if the ethical dilemma can be labeled.

3. What are the applicable meta-ethical principles? (Prioritize them if possible)

Meta-ethical principles are “large, over-riding principles ...encompassing an extensive range of behavior, morality, valued rights, and responsibilities” (Humphrey, 1999, p. 10). These principles include such concepts as *do no harm, autonomy, imbalance of power/oppression, respect, informed consent, safety, reputation, and justice*. Considering meta-ethical principles is examining the “larger picture” and situating the dilemma within a larger context. Interpreters must consider their behavioral options and the consequences within the context of applicable meta-ethical principles.

4. What options for action can you think of and what outcomes can you predict for each?

Once the ethical dilemma has been identified and the meta-ethical principles prioritized, then the interpreter can generate options for action and predict outcomes for each action.

5. Identify your choice of action with a rationale.

At this point interpreters must make the best decision possible, based on an understanding of the ethical dilemma, the meta-ethical principles in play, a review of all possible actions and their consequences, and then take responsibility for their decision. The decision should be explainable and defensible. All actions should be reviewed and analyzed.

Mentor Model

“The object of education is to prepare the young to educate themselves throughout their lives.” ~ Robert M. Hutchins

Interpreting is a life-long learning process. Those in the field understand that graduation from an interpreter education program is the beginning of the learning process, not the end. Graduates are prepared to enter the field and begin the process of self-directed learning. This can happen on the job, through in-service workshops, graduate course work, and in mentoring relationships.

Mentorship is a jointly agreed upon professional relationship between interpreters formed for the purpose of skills development. All interpreters should have mentors throughout their professional lives. If interpreters know their mentors well, they can predict what they might say even when they are not present. When faced with an ethical dilemma needing an immediate decision for action, interpreters can ask themselves, “*What would my mentor say?*” In this way, an interpreter can have an imagined conversation with one or more mentors seeking “advise” to inform the current decision before them. Of course, later, the decision can be discussed with a mentor for further analysis and learning.

Public Defensibility Model

“Adhering to the letter of the law is not enough—we must accept responsibility for our action or inaction.” ~ Josephson Institute of Ethics

While no interpreter likes to think about the possibility of having his or her actions grieved against through the RID Ethical Practices System (EPS), it behooves all interpreters to approach their work as if this were a possibility. This is not meant to encourage interpreters to work from a place of fear, but rather to encourage interpreters to make decisions responsibly and in a way that could be publicly defended. The EPS gives consumers and interpreters power for action against unethical actions.

When faced with an ethical decision, interpreters can imagine themselves standing in front of a group of their peers and answering questions such as: *Can I defend my decision clearly to the satisfaction of my peers? Can I explain clearly the process I used to arrive at my decision? Was my decision made in a defensible manner? Does my decision abide by the Code of Professional Conduct?* Another analogy is for the interpreter to imagine reading his or her decision and supporting reasons on the front page of the morning newspaper or viewed on TV on the evening news. Would the interpreter feel good about his/her decision? Would he/she be able to defend the decision without embarrassment? If the answer to any of these questions is “no” then the decision should be reviewed and other options considered.

Experiential Model

“Those who cannot learn from history are doomed to repeat it.” ~ George Santayana

Experience is a great teacher. Any parent knows that, sometimes, young people learn best from direct experience rather than from other sources. The same is true for all, including interpreters. The more interpreters work and experience life, the more vast the experiences and knowledge they bring to their work.

When making an ethical decision, interpreters can ask themselves: *What have I learned from past experiences? Have I had similar experiences that I can apply to this decision? Have I discussed a similar situation previously in my IEP classes, with my mentor, in a workshop?* Past actions can serve as a resource of information to inform current decisions. While different interpreters may arrive at different solutions to ethical dilemmas, the most one can ask of an interpreter is that he or she have a deliberate process of solid reason and approach to ethical decision-making that adheres to professional standards.

Comparison Model

“In pursuit of this profession [of interpreting] in a democratic society it is recognized that through the medium of interpreters, deaf persons can be granted equality with hearing persons in the matter of their right of communication.” ~ Preamble, 1965 RID Code of Ethics

The last model presented encourages interpreters to ask, *What if this person were a hearing person? What would happen? Should the same thing happen here?* One of the difficulties of interpreting, at times, is to let deaf consumers experience the consequences of their actions. This is particularly difficult when interpreters perceive these consequences as negatively affecting these individuals.

Assuming that the situation is not due to a lack of cultural understanding or oppression, but rather arises from informed actions of the consumer, the most respectful stance an interpreter can take is to interpret accurately and neutrally, allowing the consumer to have control over his or her own actions and the outcomes. Consumers who are deaf have the same right to make excellent decisions, or mistakes and bad choices as hearing people. The NAD-RID Code of Professional Conduct asserts that, “Members of the American Deaf community have the right to informed choice and the highest quality interpreting services” (RID, 2005, p. 1). Clearly interpreters’

professional role does not include interfering in the consumer's right to make his or her own decisions; however, it does reflect that, through quality interpreting services, consumers have the right to "informed" choice. Anything less violates the field's own values and tenets of behavior, and reflects back on former paternalistic models of interpreting. Comparing the consequences to what would happen if the consumer were a hearing person without an interpreter is one perspective for approaching ethical decision-making.

Additional Participant Suggested Models

"To think ethically means to steer your thoughts toward compliance with the rules, contributions you can make and harmful consequences to avoid." ~ author unknown

There is no "one size fits all" when it comes to ethical decision-making. Similarly there is no one path to the "correct ethical decision" for any given dilemma. Janice Humphrey (1999) describes this clearly:

As Sign Language professionals, we face moral, ethical and legal dilemmas in the course of our daily work...The real challenge comes when there are several options, more than one of which is valid...Making decisions in these cases is no simple matter. Yet we are expected to make difficult or challenging decisions within seconds while engaged in our work. Because of this complexity, it is important to consider several approaches when making ethical decisions. Eventually, you will need to shape the ideas of various decision-making models into a personalized integrated model that makes sense to you (p. 17-18).

An approach suggested by one workshop participant is application of Dean and Pollard's demand-control theory to sign language interpreting. Ethical dilemmas arise from demands of the interpreter's work other than linguistic such as environmental, interpersonal and intrapersonal. These demands can range from low to high. Interpreters have varying degrees of control (decision latitude) from low to high. According to Dean and Pollard (2001), "control refers to the degree to which the individual has the power to 'act upon' the demands presented by the job, perhaps by making decisions, bringing skills or resources to bear on the task, or altering the environment or other aspect of the task demand" (p. 2). The restrictive nature of the interpreter's role, especially the restrictions created by the profession's code of conduct, can create stress leading to burnout (Dean & Pollard. 2001). Understanding the demands that interpreters face and determining what control (decision latitude) one might have in a particular situation may be one way to approach ethical decision-making by reducing the stress involved with such decisions.

Conclusion

Not every interpreter, when faced with an ethical dilemma, will arrive at the same conclusion regarding the most appropriate ethical course of action. The field sets guidelines for not only interpreter behavior, but also ethical decision-making. These guidelines should insure consistency across interpreters' actions, not create identical behaviors among interpreters. Ethical action is still an individual choice made each time an interpreter goes on assignment. No one can make an interpreter ethical; however, ethics are learned through teaching, modeling, and teaching people how to think ethically.

A word of caution: Do not choose a model that will best "get you to the decision you wanted in the first place." These ethical models are not meant to support a particular decision; rather, the models provide a process to clarify the options available and inform a sound decision.

It is hoped that the approaches presented here will encourage interpreters to consider ethical decision from differing perspectives. The goal is to give interpreters a way to approach ethical

dilemmas that require immediate decision-making in order to arrive at a course of action that is ethically sound, legally defensible, equitable, respectful, and supports all consumers' right to make informed choices. We owe it to our consumers to do no less.

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Leadership: It's In You!

Melanie Thornton, Sharon Downs, & Amy Hebert

Abstract

Do you want to make a difference in your world? Do you desire more passion in your work and life? Would you like to feel more capable of initiating change in your work? Many of us have misconceptions about leadership—thinking of leaders only as gregarious extroverts. But leadership takes many forms. In fact, many leaders of our time have made a difference through quiet courage. Each of us can find ways to engage others and enact change. The purpose of this session/paper is to provide strategies to help participants:

- Firm up your vision
- Find your leadership niche
- Decide to take action
- Build alliances

Take the first step...walk through the door and into this session and we will all begin this journey together.



Introduction

Over the past several years, the focus of the work of Project PACE has been on creating systems change on the University of Arkansas at Little Rock campus and identifying approaches to assisting disability resource professionals on other campuses to do the same. During presentations on this topic, participants often voice concerns that while they are aware that change needs to happen, they feel powerless to make it happen on their campus. Dialogues with disability resource providers have lead us to the conclusion there are many misconceptions about what a leader is and what effective leadership looks like.

The focus of this session is not knowledge, but heart—not information, but inspiration. We asked ourselves as we conceptualized this session, “What impact do we want to have? When participants walk out the door, what do we want them to take with them?” Here is how we answered these questions. We want participants to walk out the door at the end of the session taking the following things along with them:

- A clearer vision of what they want to accomplish in their work and personal lives
- A better understanding of their own leadership style
- A plan for action
- A new way of thinking about allies

As for impact, we want to awaken the leader within each person, to revitalize, energize and remind participants of the importance of finding ways to love what they do and to bring passion back to their work. In fact, the original title of this presentation was “Finding the Leader Within: Amplify Your Life and Change Your World.” Ultimately, we want to empower participants to make a difference. And now we turn to you, the reader of these proceedings, with the same objectives. We approach this tall task by looking together at the qualities of a leader and emphasizing that the primary ingredients—a clear vision, passion, and courage to take a stand—can be possessed by anyone. We will provide examples of courage and leadership that highlight various leadership styles. We will lead participants through a series of interactive processes aimed at achieving our goals.

What is Leadership?

The premise of this paper and session is that anyone can be a leader. Ultimately, being a leader is about deciding you want to change the world. Initially, that sounds like a hard task, but in Steve Farber’s book, *The Radical Leap*, he encourages us to define “our world” in whatever way we choose. Your “world” might be creating a captioning policy on your campus, or changing the philosophy or culture of your office. Your “world” can be anything that is within your circle of influence. Steve Farber (2004) defines leadership in this way:

Real leaders take us to places we've never been, turn nothing into something, transform good into great, help us grow as human beings and change the pieces of the world that they touch for the better.

This is the definition that we ask you to keep in mind as you move forward. We suggest that true leaders have a clear vision of what they want the future to look like, the passion to communicate that vision to others, and the courage to see it through to the end. Vision, passion, and courage are attainable to all of us.

Vision

When we think about getting a clear “vision,” the driving question we want to ask ourselves is: “When I achieve my vision, what will be different? What will that look like?” Too often, we think about what we want to achieve only in words, but we do not take the time get a clear picture of what it will look like when we reach those goals.

You may wonder why this step of the process is so important. Getting a clear picture of what we want to achieve is important for several reasons. First, when we define our goals only in words, our work is mostly a mental task. But when we take the time to create a vision of what we want to accomplish, we ignite passion. And when we are passionate about a task, we are more likely to stick to it even when we face barriers. That passion gives us the courage to keep going when the going gets tough.

Second, having a clear picture of what we want to achieve is a way to engage our full mind in the task. This is a tool used by hypnotists everyday. One way to conceptualize the subconscious mind is that it operates differently than the conscious mind. We theorize that the subconscious mind understands images much better than words. How much more powerful would it be for a baseball player to visualize the ball going over the fence and the crowd applauding wildly than simply saying the words “I want to hit the ball over the fence and to get a standing ovation?” The ballplayer who takes the time to engage her senses – to get a feel of the bat hitting the ball, to visualize the ball going over the fence, to see the crowd coming to their feet – is more likely to hit that homerun. The image of that event sinks down on a much deeper level than the description of

the same event. The subconscious mind takes hold of that image and becomes an ally to that ballplayer when she steps up to the plate to hit the ball.

If you are uncertain about the power of the subconscious mind, think about what happens when you drive to work. Have you ever gotten in the car and suddenly arrived at work having no memory of how you arrived? Maybe on a conscious level you were considering how you would discuss an issue with your boss, or singing with songs on the radio. But you didn't get lost or have an accident. You didn't have any problems arriving safely at work because another part of your mind was engaged in the task. The next time you get dressed, will you have to think about each detail of that process? No. You will probably be thinking about something else as you go through the all-too-familiar motions of that task.

You may be thinking, "Yes, but driving to work and getting dressed and playing baseball are all very different from changing a policy or practice on our campus." All of these tasks are different, yet the same principles operate. In the work that we do, we often are required to make split-second decisions. When our vision is clear, it is like having a strong rudder in place. Our subconscious acts as an ally – helping us to make decisions that take us closer to that vision. Stop for a moment and take some time to answer these questions:

- 1) What are your top three values related to your work?
- 2) What are your passions, the things you really love to do, or the kind of results you love to see?
- 3) If you could make one change in your world, what would that be? What legacy would you like to leave at your place of employment?
- 4) What will be different when you achieve that change? What will that look like?

If you are having difficulty developing a vision, refer to this example. This is taken from a session in which participants were developing a vision of the campus where the social model of disability and universal design are fully embraced.

- There will be no difference between how students with disabilities are perceived and how other students are perceived.
- The campus will be barrier-free.
- Students will feel like they are a part of the process, more connected to the whole college experience, and campus community.
- Faculty/staff will reflect the diversity that exists among our students.
- Disability will be seen as an aspect of diversity.
- People will see what Interpreters do **not** as a service to deaf students but as a service to the campus.
- Students will get the message "we want you here" throughout the campus.
- Disability services will change. The role will change to one that is more of an 'environmental consultant' office and might have IT experts, curriculum development experts who assist the campus community in creating more inclusive, usable learning environments.
- The whole campus community will feel a responsibility for access.

Another way to think about the creation of your vision is to use a technique that counselors and life coaches call "treasure mapping." Again, this calls for getting a very clear and specific idea of what

you want to accomplish. Some even suggest creating a collage of images that represent the different parts of the goal.

Finding Your Leadership Niche

Once you have established a clear vision, the next step is to find your leadership niche. The word niche is chosen here very intentionally. In ecology, a niche is the way in which an organism relates to its environment and the other organisms within that environment. You might think of finding a niche as a way to thrive in the situation you are in and to relate to that environment and your colleagues in a way that maximizes the productivity of your efforts. Your leadership niche does relate to your style, but it is more than just a style. We suggest that there is no one correct leadership style. When you “google” leadership styles, most of the hits that come up refer to Kurt Lewin’s three styles of leadership: authoritarian or autocratic, participative or democratic, delegative or laissez-faire. We propose that those are actually management styles, rather than leadership styles. Managers and leaders are vastly different. If people do what someone says because that person is their boss, that is management. If people do what you say because they are inspired to do so, that is leadership. Some managers are leaders. Others are simply managers.

A leader, simply put, is one who influences others. Leadership has many faces. It doesn’t require you to be the most outgoing and gregarious, or to be in a position of power or authority. Consider your own strengths and how those strengths fit in to the environment where you work or any environment where you want to effect change. Find your niche. For inspiration we can look to many leaders throughout history who took a stand and changed the world for the better. Sometimes being a leader just requires us to sit still. Who knew that a simple act of Rosa Parks not giving up a seat on a bus would have such a far-reaching impact? What we do, how we respond to the world around us, is indeed important.

Take a minute to consider the following questions and jot down your ideas.

- 1) What are your top three strengths?
- 2) What are some tools you have to influence those in your environment?

As you work to find your niche, you may want to consider other leaders in history who have made a difference. Lao Tzu describes a leadership style that differs greatly from the traditional western views of leadership: “A leader is best when people barely know he exists. When his work is done, they will say: We did it ourselves.” Perhaps you can see your own style reflected in this quotation.

Taking Action

As we have considered vision and niche, we have focused on contemplation and planning. When we move into action, then the requirement for courage comes into play. You have already begun to take action. If you attended this session in Columbus, you took action by walking through this door. If you are reading this manuscript, you are taking action as well. What are the other doors that you need to walk through to achieve your vision? We can expect that there will be challenges, but no one said changing the world was easy work.

Taking action does not require that we are fearless. It does require us to face our fears. The title of Susan Jeffers (2006) book offers sage advice: *Feel the Fear ...and Do It Anyway!* If you talk to people about what keeps them from taking action, some of the fears they will voice are: letting others down, losing face, getting fired, being found out as a fraud, or failure. As you look at those fears more closely, they all can translate to a fear of failure. Yet, if we do not take action, we will definitely fail.

Now take a minute to think about your vision and consider ways that you can take action to make that vision a reality:

- 1) What do I want to do more of?
- 2) What do I want to do less of?
- 3) What can I do right away?

Some doors are harder to walk through than others. Fifty years ago, nine young people walked through the doors of Central High School in Little Rock, Arkansas, and the world was never the same. Maybe you can think of other examples in history of people who had courage to walk through doors and changed the world with those few steps.

Redefining Your Allies

Books and articles written on systemic change recommend, without fail, that we seek out allies for our cause. This is an important step in the process of creating your leadership niche and in creating lasting change. We propose a bit of a twist here and suggest that in addition to those people on your campus or in your circle of influence that you see as allies, there are other less visible allies that you can call upon in those times when you are called upon to walk through those doors.

Your fear as an ally. Fear can stop us from walking through a door, but if we push past it, it can be a source of energy. It creates adrenaline and that adrenaline can be channeled and can heighten our experiences. Sometimes fear is a good indicator that we are exactly where we need to be, pushing the limits that need to be pushed.

Your subconscious as an ally. As we saw before, our subconscious mind also acts as an ally. As you firm up your vision, you will find that your subconscious becomes a compass for you, guiding your decision-making and moving you ever closer to that vision of the future.

The group in your pocket. Carol Gill, in an interview with New Mobility (Byzek, 2004), gives us a powerful image. She says that when she is in a situation where something she says is devalued because of disability prejudice, it might initially deflate her, but she says "Then I think about the group in my pocket, and that fortifies me." She is referring to other disabled people who share her experience and who are advocating for change in their corner of the world. When we are working to create more inclusive equitable environments, to create a more socially just world, we are not alone in that work. We have allies throughout the world. The network of friends and colleagues that are connected through PEPNet can be considered the "group in [our] pocket[s]."

Conclusion

This paper is just the beginning of the process of finding the leader within. The authors challenge you to think about leadership in new ways, to find passion in your work, to amplify your life and to change your world for the better. We offer ourselves as your allies as well and invite you to contact us with questions, to discuss your challenges, and to share your success stories. We challenge you to become, in the words of Steve Farber (2004), "bold and audacious," to be "extreme leaders," and to turn your vision into your reality.

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PEN-International's Summer Leadership Institute for Postsecondary Deaf and Hard of Hearing Students

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Abstract

The Nippon Foundation of Japan has provided funding to the National Technical Institute for the Deaf at the Rochester Institute of Technology in Rochester, NY, to establish PEN-International, an international university network to serve postsecondary deaf and hard of hearing students. This project works to technologically link universities around the world serving such students, primarily in developing countries, through state-of-the-art instructional technologies, improving and updating curriculums, and updating instructional computer hardware and software. This paper describes PEN-International's one-of-a-kind Summer Leadership Institute, a multinational week-long program for postsecondary students. The first Institute took place August 2006 at Herstmonceux Castle in East Sussex, England. The goals of the Institute are to promote development of leadership skills, focus on advocacy skills pertaining to general access, support services and employment, and to engage in learning about Deaf Culture and awareness. A second Institute will occur in August 2008, also at Herstmonceux Castle.



Summer Leadership Institute

The Nippon Foundation of Japan has partnered with the National Technical Institute for the Deaf (NTID) at the Rochester Institute of Technology (RIT) in Rochester, New York, U.S.A. to establish PEN-International to serve deaf and hard of hearing students in postsecondary educational settings worldwide. This multi-year project, founded in 2001, works to technologically link universities around the world, primarily in the Pacific Rim and developing countries, through establishing state-of-the-art instructional technologies, improving and updating technical curriculums, and updating computer hardware and software for instruction.

The National Technical Institute for the Deaf, home base for PEN-International has a 40-year history of serving postsecondary deaf and hard of hearing students and is led by Dr. T. Alan Hurwitz who holds the title of President of NTID/Vice President and Dean of RIT for NTID. With NTID's emphasis on the use of state-of-the-art technologies to promote instruction and learning for deaf and hard of hearing students, it is utilized as a model program for PEN-International's work.

The Rochester Institute of Technology, where NTID is housed, was established in 1829 and has evolved into a major international technological university. NTID, as one of the eight colleges of

RIT, serves approximately 1,250 deaf and hard-of-hearing students who study, share residence halls, and enjoy social life together with more than 15,000 hearing students. In addition, over 560 faculty and staff members are employed at NTID. Approximately 45% of deaf and hard of hearing NTID students are fully matriculated in one of the seven other colleges of RIT, receiving access and support services through NTID. The other 55% of deaf and hard of hearing students study within NTID for sub-baccalaureate degrees.

Since 2001, PEN-International has received more than \$9 million in grants from the Nippon Foundation of Japan to support its activities. The Nippon Foundation is a grant-making foundation based in Japan that provides financial assistance to help improve the quality of life for people around the world. They address the areas of: health care, agriculture, education and disability. The goals of PEN-International are to improve teaching, learning and curriculum development; increase the application of technology to teaching and learning; and to expand career education opportunities for deaf and hard of hearing people around the world. PEN-International accomplishes this through providing professional development activities to teachers of deaf and hard of hearing students, facilitating the use of innovative instructional technologies, furnishing its partners with state-of-the-art computer labs, developing online and World Wide Web resources, evaluation and research, and dissemination. The PEN-International website can be found at: <http://www.pen.ntid.rit.edu>.

The vision for PEN-International is to develop an international network to enhance local capability and global networking at each participant institution utilizing the Importer-Self-Sufficiency-Exporter model, in which institutions are moved from importers of 'know-how' through PEN-International activities, to self-sufficiency, and then ultimately to exporters of new information and skills within their countries, creating a ripple effect.

The PEN-International network currently consists of sixteen-plus colleges and universities in Japan, China, the Philippines, Thailand, Russia, Vietnam, the Czech Republic, Hong Kong, Korea and the United States. A comprehensive list of participants can be found at the PEN website.

An important project that addresses PEN-International's work with deaf and hard of hearing postsecondary students is its innovative, one-of-a-kind Summer Leadership Institute for international postsecondary deaf and hard of hearing students. The first multinational week-long program took place 5-12 August, 2006, at Herstmonceux Castle in East Sussex, England, 100 km. south of London. A second one will occur from 9-16 August, 2008, also at Herstmonceux Castle. The purpose of this Leadership Institute is to promote development of advocacy skills in the areas of support services in postsecondary education, general access, and employment. Leadership, empowerment and deaf culture awareness is also covered. This is accomplished through presentations, discussions, demonstrations, cultural activities, and other hands-on activities provided by deaf faculty and professionals.

While this Summer Leadership Institute is primarily supported by PEN-International, additional generous funding has been received from the Bader family of Milwaukee, Wisconsin. Mr. Alfred Bader and his wife donated Herstmonceux Castle to Queens University in Canada, and the Castle is the home for Queens University's International Study Center. More information on the history of the Castle and the International Study Center can be found at: <http://www.queensu.ca/isc>. PEN-International covers all related expenses such as transportation, room and board for the Summer Leadership Institute participants including presenters, students, faculty chaperone, sign language interpreters and spoken language translators.

Students and faculty sponsors from NTID and the University of Wisconsin-Milwaukee and each of

PEN-International's major partner programs in Japan, China, Russia, and the Philippines will participate in the August 2008 Institute, making a total of 26 students and five faculty delegation leaders. All students go through an application, interview and selection process, established by each participating institution. Sixteen sign language interpreters and voice language translators, four from each country, support communication access. Further, all materials are translated from English into Chinese, Japanese and Russian. The participating institutions, along with NTID and the University of Wisconsin-Milwaukee, are: Tsukuba University of Technology, Ehime University, and University of Hiroshima, Japan; Tianjin University of Technology, Changchun University and Beijing Union University, China; Bauman Moscow State Technical University, and PEN-Russia, Russia; and De la Salle College of St. Benilde, Manila, Philippines.

The goals of the Institute are to:

- Promote development of leadership skills among postsecondary student ambassadors.
 - Focus on advocacy skills in the areas of general access, support services and employment.
 - Engage in learning about Deaf Culture and multi-cultural awareness.
- This is accomplished through ice breaker activities, presentations and discussions, group exercises, cultural performances and demonstrations, and social activities and field trips.

The Summer Institute faculty members, most of whom are deaf or hard of hearing, are prominent leaders within NTID, the greater Rochester deaf community, and the international deaf community. They are: Dr. T. Alan Hurwitz, President and Vice President/ Dean, NTID at RIT; Mrs. Vicki T. Hurwitz, consultant and former director of the Rochester School for the Deaf Outreach Center, Rochester, NY; Ms. Patricia Mudgett-DeCaro, Consultant, Rochester, NY; Mr. Scot Atkins, Director of Human Resources, Interpretek Agency, Rochester, NY; Mr. Alim Chandani of NTID's Student Life Team; Ms. Cassie Franklin, Counselor, University of Wisconsin-Milwaukee; Dr. Mayumi Shirasawa, PEPNet-Japan; Dr. James DeCaro, Director, PEN-International; and Dr. Denise Kavin, Senior Project Associate and Summer Leadership Institute Director, PEN-International.

Various workshops presented throughout the week are designed to address topics such as: leadership styles, self-determination and advocacy, developing effective communication and persuasion skills, forming alliances, cultural diversity, deaf culture, empowerment, achieving goals, employment and work-based learning, and access and accommodations.

During the Institute, students are expected to fully participate in all activities, give group presentations on leadership, conduct cultural activities and exchanges, and keep daily written or video journals of their experiences. All photos and written and video journals will be posted on the PEN-International website. As a follow-up after the Institute, students are expected to give group presentations about their experiences at the weeklong Institute at their postsecondary institutions, and complete projects that influence policy and/or make a substantial contribution to their educational institution and/or surrounding community. Finally, students and their faculty sponsors are expected to submit final reports, all within a 12-month period under faculty supervision. In all, as a result of participating in the Institute, students need to demonstrate the following: Enhanced leadership, advocacy and communication skills; increased understanding of the goal-setting and decision-making process; increased knowledge regarding accommodations and support services for access; increased knowledge regarding employment and work-based learning for deaf and hard of hearing individuals; and increased understanding of deaf culture in participant countries.

PEN-International has developed a website dedicated to this Summer Leadership Institute. All PowerPoint presentations and related materials will be available in English, Japanese, Chinese and Russian and posted to the website for public viewing and downloading. The URL address is:
<http://www.pen.ntid.rit.edu/summer-institute.php>.

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